# ENGINEERING NEWS-RECORD

Engineers at Camp Claiborne simulate a bomb attack on a suspended oil line.

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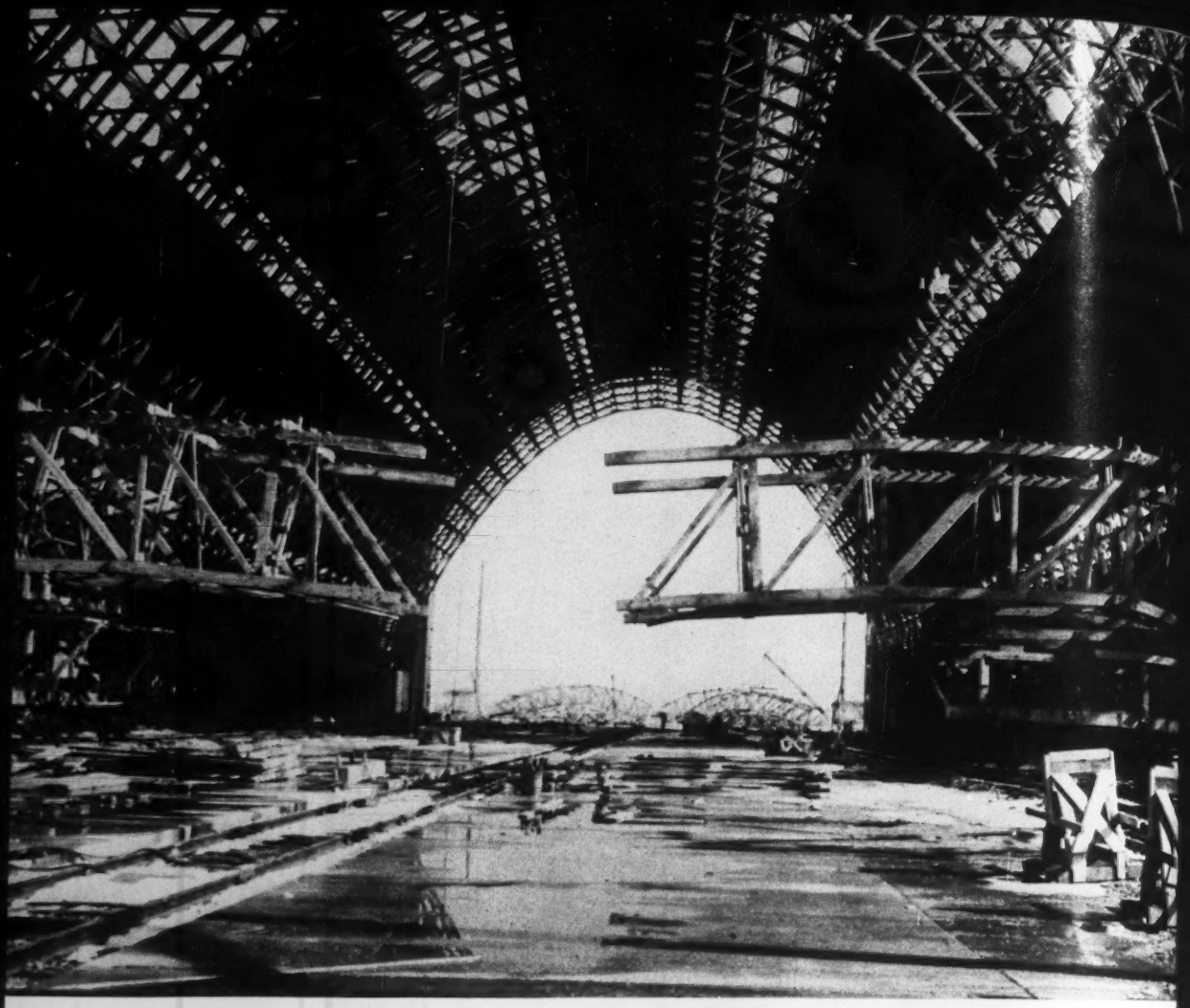

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The Week In Engineering and Construction

INEERING NEWS-RECORD • OCTOBER 28, 1943 • VOLUME 131 • NUMBER 18

# urvey shows little change n postwar sewage equipment

**gineers at Federation of Sewage Works Associations eeting assured they may safely base future designs on ewar specifications. A. M. Rawn elected president.**

y lingering doubt held by engineers unicipal officials that advance plans ewage treatment plants might be- obsolete because of revolutionary ar changes in equipment were dis- d by the manufacturers themselves eport to the Federation of Sewage s Associations when that group met icago last week.

B. Marshall of The Chain Belt Co., aukee, stated that a recent survey leading manufacturers in the water ewage works field revealed unani- agreement that designing engineers specify products in accordance the latest prewar issue of catalogs be reasonably certain that the im- ate postwar product would be the .

s spokesman for the manufacturers' ge works division executive commit- Mr. Marshall said that refinements improvements would be incorporated ew equipment but that such antici- d changes should not have any bear- on the advance designing of sewage s projects.

e stated further that only two of the manufacturers canvassed indicated intention of marketing a radically product for immediate postwar use. both cases these manufacturers al- dy had supplied adequate data to ineers and thus made it possible for ential users to incorporate the product their advance designs.

### Postwar action urged

The report of the manufacturers formed of a symposium to stimulate action postwar activities. Leader of the dis- sion was Morris M. Cohn, editor of *age Works Engineering* and city itary engineer of Schenectady, N. Y. Mr. Cohn urged the adoption of a n Year Plan" during which 6,000 age disposal plants could be built or abilitated at an estimated cost of two ion dollars. At the present time, he d, there are about 6,000 civilian plants operating in the United States, which represents treatment facilities for only 58 percent of the sewered population. His 10-year estimate of new work was based on providing treatment facilities "for every gallon of domestic sewage and industrial wastes."

Municipal officials are reluctant to initiate postwar projects, reported Charles Emerson, of Havens and Emerson, consulting engineers, because they lack the answers to these three questions: (1) Will funds be available after the war? (2) Will "revolutionary" processes and equipment result from war research? and (3) can a reasonable forecast be made of a community's postwar needs?

Answers to questions like these, said Mr. Emerson, can be provided for each community if competent engineers are employed to analyze a situation.

An outline of Canadian needs in the postwar period was provided by Dr. Albert E. Berry, director of the sanitary engineering division of the Ontario department of health, who stated that there were 500 sewered communities in Canada

(*Continued on page 6*)

ENR Staff Photo

## Their Egyptian airbase was dedicated this week

*A great Army Engineer achievement was celebrated last Monday in the Egyptian desert near Cairo, when one of the world's largest airports, destined for the use of our transport planes carrying supplies and personnel to the Far Eastern battlefronts, was dedicated. Known as Payne Field, the base, formerly used by a British reconnaissance squadron, was enlarged in 58 days to accommodate six times its former traffic. It was one of those described in Waldo Bowman's article, "The African Construction Front" (ENR Sept. 23, 1943, p. 454).*

*The top Engineer officers responsible for the work, which included 45,000 sq. yd. of concrete aprons, 235,000 sq. yd. of sand-asphalt runways and taxi tracks, as well as hangars, barracks and freight and passenger terminals, are shown above. In the center is Col. John N. Hodges, chief of the construction division of USAFIME (U. S. Army Forces in the Middle East), while at the left is Lt. Col. J. A. MacAlarney, his executive officer, and at the right is Major L. T. Weathers, who supervised the field work. Final authority rested in Brig. Gen. Gilbert X. Cheeves, chief S.O.S.*

*An Associated Press dispatch from Cairo reports that Maj. Gen. Ralph Royce, USAFIME commander, as part of the dedication ceremonies, pinned a medal on Col. MacAlarney, "who, as chief of the construction division, supervised completion of the field," indicating apparently that Col. Hodges has been transferred since the above picture was taken in August.*

# Accrediting of engineering courses curtailed by E.C.P.D. due to war

## *Engineers' Council for Professional Development reduces some activities due to conditions growing out of the war but expands others*

Accrediting of curricula at engineering schools, which heretofore has been a major activity of the Engineers' Council for Professional Development, has had to be curtailed due to the emergency conditions under which the engineering schools are now working. This fact was reported to the council by D. B. Prentice, president of Rose Polytechnic Institute, at its annual meeting held in New York Oct. 22-23. Mr. Prentice reported, however, that in order to avoid injustice to some schools where curricula were under study, curricula at eight colleges were investigated and consideration was given to eleven at other schools during the year. Temporary extensions of provisional accrediting were granted to 34 curricula at 14 schools.

In anticipation of the large amount of accrediting and reviewing of curricula that will have to be done after the war, the E. C. P. D. has begun to build up a reserve to cover that work.

### Student selection

One activity that has been expanded is that of the committee on student selection and guidance which relates to the establishment of test procedure to determine the probability that a prospective student will satisfactorily complete an engineering curriculum. At the meeting, A. R. Cullimore, president of Newark College of Engineering, reported that the Carnegie Foundation for the Advancement of Teaching was so favorably impressed with results already obtained in tests conducted at Yale jointly by the E.C.P.D. and the Society for the Promotion of Engineering Education that it has provided $15,000 to make possible an expansion and continuation of the study. E.C.P.D. will contribute $3,000.

### Manual for junior engineers

Everett S. Lee, chairman of the committee on professional training, reported that W. E. Wickenden has agreed to write the "Manual for Junior Engineers" for which the committee recently prepared an outline. It is hoped to have the manuscript ready for approval by next summer.

In order to obtain greater help from local groups in advancing the objectives of the council, a committee headed by J. F. Fairman, assistant vice president, Consolidated Edison Co., New York, has prepared a pamphlet entitled "Will You Help?" It is hoped that the pamphlet will be ready for distribution through the major engineering societies early in 1944.

### Canons of ethics

D. C. Jackson, emeritus professor of electrical engineering, M.I.T., reported that the Society for the Promotion of Engineering Education, the American Institute of Electrical Engineers and the American Institute of Consulting Engineers have approved the E.C.P.D. proposed canons of ethics with modification in phraseology and arrangement. On the other hand, Prof. Jackson reported that the findings of the boards of the civil and mechanical engineers were "somewhat inter-destructive." If deletions proposed by each society were made, there would be little left in the proposed canons.

Prof. Jackson's committee also presented for approval a statement entitled "Faith of the Engineer." Subsequently the statement was approved by the council for publication for such use as engineers might wish to make of it.

### New officers

Everett S. Lee, engineer in charge, general engineering laboratory, General Electric Co., Schenectady, N. Y., was elected chairman of the council to succeed R. E. Doherty, president of Carnegie Institute of Technology, who has served in the capacity for three years. J. W. Parker, vice president and chief engineer of the Detroit Edison Co., was elected vice chairman to succeed S. D. Kirkpatrick, editor of *Chemical and Metallurgical Engineering*, Stephen L. Tyler, executive secretary of the American Institute of Chemical Engineers was elected secretary, and R. L. Sackett, acting secretary of the A.S.M.E., assistant secretary.

**Everett S. Lee**

## Postwar work discussed at A.I.S.C. meeting

Construction in the postwar period the theme of the technical session at annual meeting last week at Rye, N. of the American Institute of Steel C struction. A paper by Charles F. G rich, chief engineer of the Ameri Bridge Co., on technical aspects of war work brought forth much comm as did a paper by LaMotte Gro structural engineer, Air Reduction describing recent welding develop and the role welding will play after war.

Mr. Goodrich reported that in the conversion of American industry to mal production, several develop were expected. These included: A l demand for galvanized products; creased emphasis on prefabrication a demand for a larger amount of sma steel shapes; much elevated high work in the larger cities; construction a number of long-span bridges for wh plans are now being prepared; exten research and experimental work to prove the art of welding; and grea attention to the problem of welding hi strength steel. It was the belief of Goodrich that fabricators who h gained a large amount of welding perience during the war will be able weld with safety structural steel conta ing at least 0.30 per cent carbon.

An important problem to be decid after the war, Mr. Goodrich stated, whether working stresses for st should be increased.

In his paper Mr. Grover emphasiz that many of the welders now employ at American shipyards will be free af the war for other welding work. Th transfer is expected to result in an i crease of welding on many other types construction. Mr. Grover also expects increase of all-welded construction eliminate a present combination of ri eted and welded construction, which many cases is costly. In describing t advantages of welding he emphasized t large increase in output of fabricati plants that switched from riveting welding.

In the discussion that followed the tw papers it was pointed out that great production is possible by welding whe the work is repetitive; but that with no duplicating assembly riveting will co tinue to play an important part. Speci jigs and other equipment were seen making non-duplicating welding too e pensive to replace riveting for muc fabrication.

**ENGINEERING NEWS-RECORD.** Published every Thursday. **Return postage guaranteed.** Vol. 131, No. 18. Price 25c per copy. Allow at least ten days for change address. All communications about subscriptions should be addressed to the Director of Circulation, 99-129 N. Broadway, Albany, N. Y., or 330 West 42nd Street, New York N. Y. Subscriptions, United States, U. S. Possessions and Latin American Republics, $5.00 for one year, $8.00 for two years, $10.00 for three years. Canada, $5.50 for one year, $9.00 for two years, $11.00 for three years. Great Britain and British possessions 54 shillings for one year, 108 shillings for three years. All other countries, $8.00 for one year, $13.00 for three years. **Entered as second-class matter October 29, 1936, at the Post Office at Albany, N. Y., under the Act of March 3, 1879.** Printed in U.S.A. Cable Address: "McGrawhill New York." Member A.P.B. Member A.B.C. Copyright 1943 by McGraw-Hill Publishing Company, Inc. James H. McGraw, Founder and Honorary Chairman; James H. McGraw, Jr., President; Howard Ehrlich, Executive Vice-President; Mason Britton, Vice-President; Curtis W. McGraw, Treasurer; Joseph A. Gerardi, Secretary; J. E. Blackburn, Jr., Circulation Manager. **Publication office: 99-129 North Broadway, Albany 1, N. Y. Editorial and Executive Offices: 330 West 42nd St., New York 18.** District Managers and Branch Offices: Fred G. Hudson, 520 N. Michigan Ave., Chicago; J. W. Otterson, 68 Post St., San Francisco; Aldwych House, Aldwych, London, W. C. 2, England; Washington; J. M. Spackman, New York; A. B. Cozzens, Philadelphia; E. E. Duff, Jr., Cleveland; B. F. Horn, Detroit; Richard Y. Fuller, St. Louis; R. N. Phelan, Los Angeles; J. I. Ballard, Boston; Ralph Maultsby, Atlanta, Ga.

## .S.C.E. expands its activities lating to employment conditions

**sections authorized to set up machinery under which employed eers can be independently represented in collective bargaining.**

move designed to give employed ers independent representation in ive bargaining similar to that pro- by trade unions, the board of direc- of the American Society of Civil eers, at the meeting held in Atlanta, on Oct. 11, recommended to the sections of the society that they their constitutions to permit the lishment of local collective bargain- mmittees to represent engineers in tive bargaining when such engi- do not wish to be represented by a union. The board also voted to d the society's staff to permit one ant secretary to be assigned to each four zones into which the society s the country to devote his time to rs relating to employment condi-

more than a year the society has an assistant secretary, Howard F. worth, devoting the major part of me to this work. Expansion of this was recommended to the board by mmittee on employment conditions sting of A. M. Rawn, chairman, y G. Classen, Gail G. Hathaway, Okey and Richard G. Tyler.

**Engineers lack representation**

der existing labor laws, profession- minded engineers who do not wish to epresented in collective bargaining by one of the existing trade unions have found themselves handicapped by lack of representatives who would be recognized by the War Labor Board. Action by the A.S.C.E. board on this matter, which has been under discussion for many months, was brought to a head by the refusal of a WLB panel at Kansas City to recognize a group of more than 100 engineers at the Sunflower Ordnance Works at Eudora, Kan., as a separate bargaining group because they did not apply for such independent recognition before Local No. 30 of the International Federation of Technical Engineers, architects and draftsmen's unions had applied for and had received recognition as the bargaining agency for the entire technical, engineering and architectural group at the plant.

**Local action needed**

Federal legislation requires that collective-bargaining units must be local in character, although they may be affiliated with national organizations. Hence the board of the society has recommended to its local sections the adoption of amendments to their constitutions that will permit the creation of local collective bargaining units.

These units may represent any employed engineers without regard to membership in the American Society of Civil Engineers. All expenses of the unit are to be defrayed from dues collected from the employees who signify their desire to have the unit represent them.

• • •

## Illinois pollution suit stirs four Indiana cities

Acting on a petition of the State of Illinois to restrain the four Indiana cities of Gary, Hammond, East Chicago and Whiting from polluting Lake Michigan, the U. S. Supreme Court on Oct. 18 directed the State of Indiana and those four cities to show cause by Dec. 20 why they should not be restrained by injunction from "discharging undisinfected sewage or other noxious, offensive or injurious matter" into the lake.

Illinois' petition had charged that sewage from these Lake County cities has "poisoned, polluted, contaminated and rendered unfit for drinking and domestic purposes the waters used by the citizens and inhabitants of Illinois." Filing of the petition with the Supreme Court was occasioned by Illinois' attempt to reduce the amount of pollution from these industrial towns being dumped into Lake Michigan near the water intake serving Chicago's south side district.

The Gary domestic sewage treatment plant has been in operation for three years although steel mills in that city still continue to discharge untreated waste water into the drainage system that empties into the lake. Hammond's sewage treatment plant has been operated two years. East Chicago's plant may be completed next spring but Whiting has no plant.

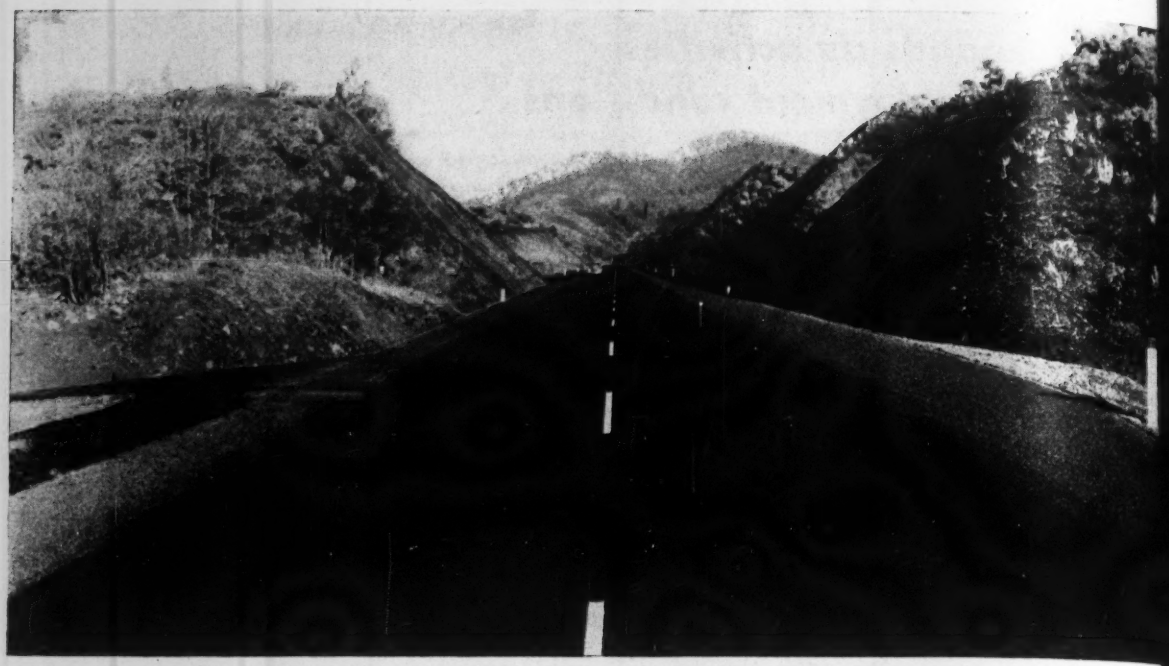
### Concreting under way in final cofferdam at TVA's Kentucky Dam

*al river section of Kentucky Dam is now e concreting stage after completion of one e largest cofferdam projects ever under- e. This stage of construction required mov- more than a million yards of earth, gravel rock in preparation for placing half a mil- yards of concrete.*

*ntucky Dam, under construction by the nessee Valley Authority with their own nt, is one of the largest structures east of the Rockies. Total construction quantities include: Earth excavation, 6,000,000 cu. yd.; rock excavation, 600,000 cu. yd.; earthfill, mostly in a mile long dike, 4,000,000 cu. yd.; concrete 1,300,000 cu. yd. Construction started in 1939 and the dam is scheduled for completion in the spring of 1944. Slow material deliveries and shortage of construction labor have delayed completion somewhat.*

*Construction has been a long and laborious process because of 60 ft. of gravel overlying the bed rock, necessitating cellular sheet-pile cofferdams of unusual size. (ENR, Jan. 1, 1942, p. 30 and Jan. 29, 1942, p. 194). The final cofferdam is now unwatered, the gravel excavated and most of the bottom concreted.*

*C. E. Blee is chief engineer and A. L. Pauls is chief construction engineer of the Tennessee Valley Authority. G. P. Jessup is project manager at Kentucky Dam.*

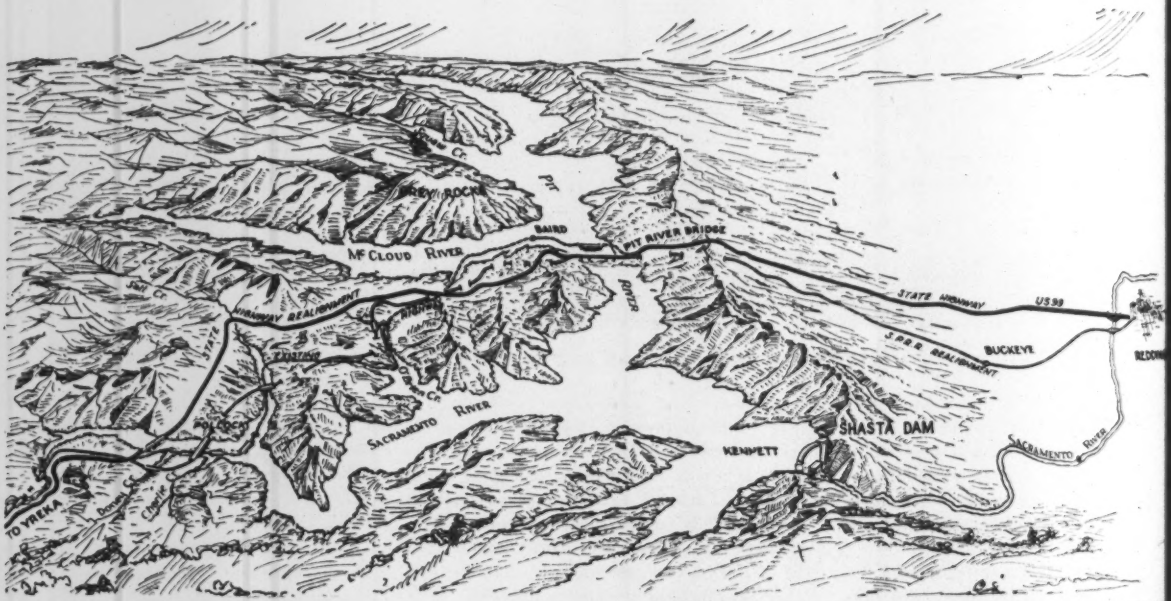


**Wide shoulders, straight alignment and heavy grading feature the new route, which bypasses Shasta Dam Reservo**

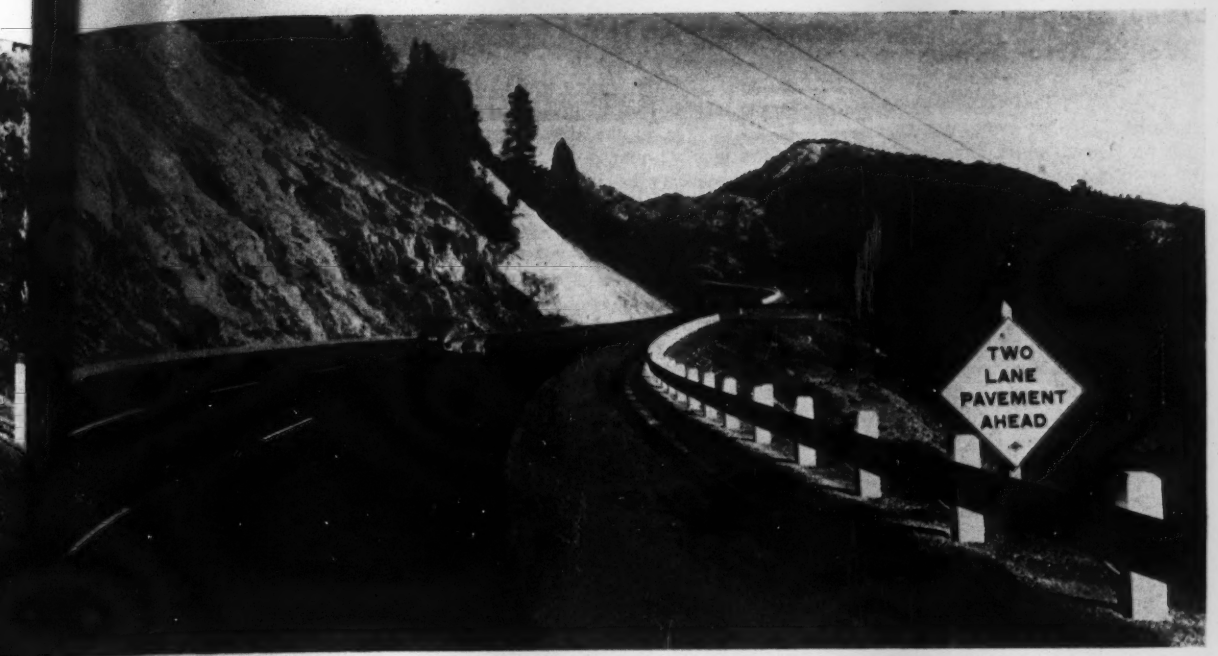
# Highway Around Shasta Dam Reservoir

Construction of Shasta Dam will create a large reservoir that will flood out some 19 mi. of the highway route that has been followed by California's main north and south traffic since it was popularized by the early pioneers as "the Oregon Trail." To replace this mileage, the California Division of Highways, with the aid of the U. S. Bureau of Reclamation, has recently completed a 15½-mi. relocation project that will bypass the reservoir. The total cost of the new route was about $7,245,000.

The relocation starts at the town of Redding, crosses the Sacramento Ri on the outskirts of the town and pas to the east of the main body of the res voir. It crosses the Pit River arm the reservoir some 500 ft. above the riverbed on the upper deck of the fa ous Pit River Bridge, the highest doub




**Sketch showing relocated highway around the reservoir behind Shasta Dam. Cost of the new route was about $7,245,000.**




*...ves on the new highway have a minimum radius of 700 ft. and are so designed that a speed of 60 m.p.h. is considered safe.*

highway and railroad bridge in the d, and rejoins the old road in the on above the upper end of the reser-

The new route involves exception- heavy grading through rough moun- . Excavation on the southerly 4 mi. ge 344,000 cu.yd. per mile. Of the grade separations one was effected ringing the highway onto the Pit r Bridge from the left and taking it n the right; three other grade separa- in the southerly 4 mi. of the work effected by the simple expedient of ing the highway over tunnels. The separation, at the northerly end of new line, is effected by a four-lane rpass.

was possible to locate some of the est cuts in native shales in which the tenance problem is not expected to erious and whose crushed fragments ide a very satisfactory subgrade. The way itself consists of a 0.5-ft. crush- n base for the full width, surfaced a 0.2-ft. plant-mix asphalt in the al 22 ft. which is topped with a t-mixed, non-skid surfacing applied e rate of 55 lb. per sq.yd.

rticular attention was given to lders which are surfaced with a t mix and a seal coat of class "C- The one underpass, already men- d, is paved with four lanes of port- cement concrete.

the old highway route through the on safe speeds were rated by the e department of the California Divi- of Highways as low as 25 m.p.h. for iderable distances. On the new , which is 3.7 mi. shorter than the one and has an appreciable reduc- in grades, designed speed is 60 m.p.h.

*This view near Black Oak summit is typical of many along the new highway.*

*The last separation at the northerly end of the job is a four-lane underpass.*

## Federation of Sewage Works Associations

(*Continued from page* 1)

but only 115 treatment plants. That much work needs to be done in providing both sewerage and treatment facilities is revealed by the fact that public water supplies already exist in 1,300 communities.

### No polio in sewage?

The significance of poliomyelitis virus having been found in urban sewage on several occasions is not unduly alarming, inasmuch as the virus is believed to be quite unstable in this medium so that its survival is possible only a matter of few hours. This was one of the statements made by Dr. Kenneth F. Maxcy of The Johns Hopkins School of Public Health, who reviewed existing knowledge on the dissemination of infantile paralysis disease.

Dr. Maxcy also revealed that, from an epidemiological point of view, polio does not behave like a water-borne disease. It never has been correlated with poor water supplies nor have explosive outbreaks or widely scattered cases appeared in cities with municipal water systems, as would be the case if the virus were disseminated through the water mains. Furthermore, cities with water sources located in remote spots far from human habitation suffer from the disease as frequently as those obtaining water from sewage-polluted streams.

### Industrial waste problems

Problems of treatment and disposal of industrial wastes during the present emergency were reviewed by Dr. F. W. Mohlman, director of laboratories for the Chicago Sanitary District. Some of these problems are directly connected with armament and munitions, others with new products developed for war needs, and still others are caused by established industries being expanded to new production levels. As an example of the increased organic loadings on treatment processes caused by expanded production activities Dr. Mohlman stated that the population equivalent of Chicago's West-Southwest Treatment Works has been increased by more than half a million since 1940, based on flow and biochemical oxygen demand.

A typical example of the increased load on water purification facilities resulting from pollution is revealed by a survey of the steel mills in the Calumet area around Chicago. This showed that during 1938 there was a loss of 1,400 tons of iron and 1,335 tons of sulfuric acid resulting from the pickling of metal. With production in these steel plants now rated at 100 percent of capacity, the losses are 3,500 tons of iron and 3,340 tons of sulfuric acid per year. These wastes are discharged into the Calumet River and although of no significance with reference to health, the iron precipitates to form sludge while oxidation of the ferrous iron uses some of the dissolved oxygen in the stream.

The pickle liquor problem of the steel mills seems to be just about where it was during World War I, said Dr. Mohlman, in spite of the large amount of work and money that has been spent on investigations of the recovery of disposal of the iron and acid.

One gratifying aspect of wartime industry, with reference to the effect of industrial wastes on streams, has been the fat recovery program of the WPB, he said. Evidence that the household fat recovery program has been helpful in keeping fat out of the sewers is contained in a recent report showing that 150 million pounds of household fats have been salvaged during the past year in American homes and by the Army and Navy.

Another means by which the discharge of fats and greases into sewers may be reduced, according to Dr. Mohlman, is the recovery of salable grease from skimming tanks through treatment works. However, this is not always feasible commercially since in many cases the recovered grease will have such a high content of mineral oil, waxes and other contaminants as to lower the value of the grease to such a point that it cannot be sold. Dr. Mohlman pointed out that New York City reports sale of recovered skimmings at 80 cents per 100 lb., and the Chicago Sanitary District has been offered 55 cents per 100 lb. for an estimated daily production of 14,000 lb. of skimmings at one of its treatment works.

### Latin American report

The prospect of an appreciable post-war market in Latin American for North American engineering services and equipment, so far as sewage disposal facilities are concerned, were quite limited in the opinion of Edward J. Cleary, managing editor of *Engineering News-Record*, who described his experiences during a 16,000-mile journey in South America.

He stated that other more basic needs, such as water supply and environmental health facilities, call for first attention south of the border. Furthermore, with much of its population living in rural areas, present Latin American problems of sewage disposal are concerned primarily with the installation of simple facilities and that these will not require any mechanical equipment.

Other discussions at the three day conference, which drew a registration of over 600 (about 25 percent more than last year), dealt with personnel, operation and maintenance problems under war conditions.

Maury Maverick, director of the Bureau of Governmental Requirements, WPB, and A. M. Rawn, special consultant to the bureau outlined developments in connection with priority applications for materials and equipment. Mr. Maverick reported that aluminum and copper were becoming more easily available for essential needs, as were iron and some types of steel. Lumber, on the other hand, was reported to be more critical than at any time heretofore.

### Federation business

One of the major actions taken by the Board of Control of the Federation was the appointment of W. H. Wisely as full time secretary as well as editor and business manager of the association's Sewage *Works Journal*. Mr. Wisely, who previously served as part-time secretary, will receive a yearly salary of $6,500.

Dr. F. W. Mohlman, who resigned as editor of the *Journal*, a post he has occupied since 1929, acceded to the request of the board that he continue to serve in the capacity of consulting editor.

Membership of the Federation was reported to be 2,544, a gain of 153 or 6 percent during the last year. Pittsburgh was selected as the meeting place for next year's conference.

A. M. Rawn, chief engineer and general manager, Los Angeles County Sanitation District, was elected president for the coming year to succeed George J. Schaefer, chief engineer, Minneapolis-St. Paul Sanitary District. Dr. Alton E. Berry director of sanitary engineering division, Ontario department of health, is the new vice president. W. W. DeBerard, city engineer of Chicago, was re-elected treasurer.

Pres. Rawn

Honorary memberships were conferred on H. E. Moses, chief engineer of the Pennsylvania state department of health, and Charles G. Hyde, professor of sanitary engineering, University of California.

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## Road gravel requirements doubled in Michigan

An increase of nearly 100 percent in the amount of gravel required for repairs on Michigan's trunk line highways was provided for when the State Highway Commission, recently received bids for 624,525 tons of gravel. Only 350,000 tons were used last year. According to Charles M. Ziegler, state highway commissioner, the increase in gravel required for road maintenance is due to heavy damage caused by an extremely severe winter with several cycles of freezing and thawing.

## WASHINGTON HIGHLIGHTS

...e facilities committee of the War ...uction Board has approved resump... ...of work on the $15 million Anderson ...h Dam in Idaho, standing idle since ...PB stop-order went into effect last ...r, when construction was a third or ...complete.

...so approved is resumption of work ...he Coachella Canal project of the ...American Canal project in California, ...Deschutes project in Oregon and the ...o River project in Utah. Work will ...start until the Bureau of Reclama... ...has received the necessary priorities.

...the case of two Bureau of Reclama... ...projects for which WPB has with... ...n earlier stop-orders, it has speci... ...the proportion of free labor that can ...mployed. For Deschutes Project in ...gon, stopped when it was about half ...plete, it has specified use of a maxi... ...of 100 free workmen; and 175 for ...Coachella Branch of the All American ...al in southern California, which is ...t three-fourths complete. Conscien... ...s objectors, and war prisoners—if ...lable—can be used.

...ecause supplies of the thinner sizes ...lain red and white oak lumber are ...low, the Office of Price Administra... ...acting upon recommendation of the ...Production Board, has announced ...ges in ceiling prices for such lum... ...coming from the Southern hardwood ...on. The increase varies from one to ...dollars per 1000 board feet in sizes ...ing from one to two inches in thick... ...Changes are at the lumber produc... ...level and will be reflected at all ...ls. It was found that users unable to ...re the thinner sizes had been com... ...ed to buy thicker stock and resaw it ...t their requirements.

...mitation on settlements made in the ...t of loss of or damage to construc... ...and road maintenance equipment ...ng rental has been established by ...Office of Price Administration. Maxi... ...settlement is limited to the maxi... ...price, as established by regulation, ...sale of the equipment at the time ...amage. This means that neither the ...price nor the appraised value at ...time of leasing can be used for set... ...ent. It means, further, that if the ...ies concerned agree that, prior to ...age, the equipment was in condi... ...to qualify as "rebuilt and guaran... ..." settlement can be made at 85 per ...of new value. If they cannot agree, ...ement will ordinarily be on a 55 per ...basis.

The function of the Joint Price Adjustment Board recently set up by the War, Navy, and Treasury departments, the Maritime Commission and the Reconstruction Finance Corp., is solely one of coordinating the renegotiation activities of those agencies and their subsidiaries, and does not affect procedures in renegotiating construction contracts. The new board will simply formulate general policies and make interpretations under the existing renegotiation statute. Heretofore, such matters of agreement between agencies have had to be made in individual cases; now, general policies will be formulated.

The 48-hour week will be applied before November 15 in all areas where labor shortages have become acute, and within 30 days in all areas after they are brought into Group I—the group in which acute labor shortages have developed—Paul V. McNutt, Chairman of the War Manpower Commission, announced Oct. 21.

Instructions concerning the extension of the longer work week sent by the commission's Bureau of Manpower Utilization to all Regional Manpower Directors also suggest the possibility of its application soon in areas where labor shortages have not yet developed.

Applications for certain types of both industrial and non-industrial construction projects of not over $10,000 will hereafter be handled by the field offices of the War Production Board. Amendments to applications originally processed through field offices will be handled through those offices so long as they do not raise the cost more than 50 percent above the original estimate. This new ruling applies chiefly to privately financed works.

## General Keller is given Legion of Merit award

Brig. Gen. Charles Keller, recently retired from active service, received the Legion of Merit award for his outstanding service as district engineer of the Chicago District, U. S. Engineers. Major General David McCoach, Jr., Assistant Chief of Engineers, made the presentation as Mrs. Keller looked on. At the time of his retirement, General Keller, who is 75, was the oldest officer on duty in the U. S. Army. A graduate of the U. S. Military Academy in 1890, he advanced progressively from 2nd lieutenant to colonel in the regular army.

General Keller's outstanding accomplishments during a long and successful career in the Army Engineers cover a wide latitude of river and harbor work and flood protection. They include the development, in 1910, of a submerged wire sweep for making hydrographic surveys which is still considered the most accurate method for locating obstructions to navigation.

Promoted to rank of brigadier general in 1918, General Keller served as deputy chief engineer of the A.E.F. He later became engineer commissioner of the District of Columbia. General Keller retired from active service in 1923 and reentered it in 1940.

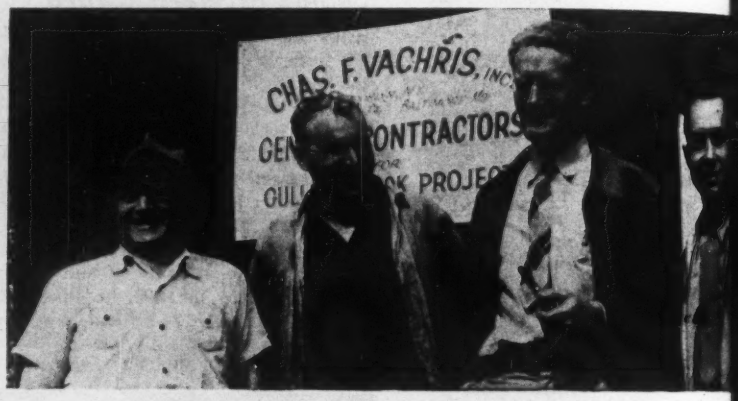
*Maj. Gen. David McCoach, Jr., (left) pins Legion of Merit award on Brig. Gen. Charles Keller as Mrs. Keller looks on.*

# MEN AT WORK

*Lieut. J. D. Burkey (CEC) USNR, officer in charge of construction for the Navy Bureau of Yards & Docks on a West Coast job for construction of Naval facilities.*

*Prominent Chicago engineers observe an hydraulic test being made on a 2-mile leng 36-in. dia. prestressed concrete pressure water pipe that serves a war plant. From left to W. W. DeBerard, city engineer; J. B. Eddy and B. W. Cullen, engineer and superinte respectively, of the water pipe extension department.*

*As director general of the Costa Rican public works department, Alfonzo Peralta, graduate of a United States engineering school, is supervising a large building program, including the construction of several school buildings.*




*Key men on a big sewer project now under construction as part of a flood-control progra Hartford, Conn., are the four above: They are, left to right: Chas. F. Vachris, presid Chas. F. Vachris, Inc., the general contractor; Anthony F. Vachris, superintendent for the Va firm; and Hans S. Jensen, resident engineer, and A. V. Giacomini, officer engineer, respec for the U. S. Engineers.*

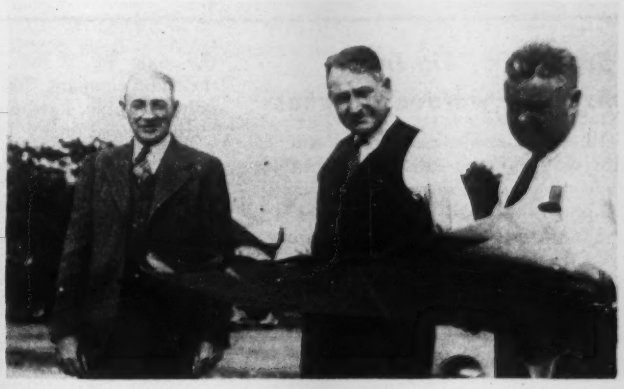
*Because of the large flood-control program now under way at Hartford, Conn., C. W. Cooke, division engineer of the city engineer's office, who is loaned to the Hartford Flood Control Commission as engineer, is mighty busy these days.*

*Five engineers playing an important part with the Ohio State Highway Department are, to right: S. O. Linzell and A. G. Cochran, maintenance engineers; John Gothorn, bitum engineer; B. H. Swearingen and D. N. Richeson, maintenance engineers. They all work in main offices at Columbus.*

*, Coburn, chief engineer of the Massa- Department of Public Works, pauses the editor of highway developments in . His biggest road job is a divided at West Springfield.*

*Ralph B. Cornell (left), senior civil engineer in the Boston office of the Federal Works Agency, and William A. Braisted, construction engineer in the same office, have charge of all FWA water and sewer jobs in New England.*

*H. E. Langley, bridge engineer, New Hampshire State Highway Department, takes time out to describe repairs to a timber bridge in his state and to answer questions about plans for postwar work.*



*argest road project now under way in Massachusetts is construction of two miles of divided highway at West Springfield. Men in charge for assachusetts Public Works Department are pictured at the left. They are, left to right: H. A. Corr, resident engineer; C. B. Raymond, t engineer, and K. C. Prescott, district materials engineer. Key men on the job for Kelleher Corp., Turner's Falls, Mass., the general ctor, shown at the right, are: Steve Kelleher (left) general manager and vice president; L. J. Kelleher (center), treasurer of the firm; . E. Cassidy, engineer.*

*y L. Kinsel, design engineer with Met- Eddy, Boston, points out details of supply facilities for a Lowell, Mass., e plant. His firm prepared the neces- ions for the supply.*

*On difficult submarine main construction at Portland, Me., Neil Medberry (left) is resident engineer for Metcalf & Eddy, consultants, and James R. Gardner (right) is project engineer for the Federal Works Agency.*

*J. Harold Johnson, assistant commissioner of the New Hampshire State Highway Department, reports little road construction now under way in his state. However, his staff is busy on postwar planning.*

# Navy construction program 85 percent finished

Celebration of Navy Day, Oct. 27, can take no better form, so far as the construction industry is concerned, than a survey of the accomplishments of the Bureau of Yards and Docks, its contractors and construction personnel. The basic fact is that the $8,000,000,000 program that was scheduled during the three years July 1, 1940 to June 30, 1943, is now 85 percent complete.

This program was divided into industrial facilities, $3,200,000,000, and non-industrial facilities, $4,800,000,000. Sixty percent of the industrial facilities construction was for shipbuilding and repair, the remainder being divided equally between ordnance and aircraft. Almost 30 percent of the money spent for non-industrial facilities construction has been for naval aviation shore facilities. The other subdivisions of lesser amounts are, in order of size, advance bases, structures for naval personnel, storage, ordnance depots, fleet facilities and miscellaneous facilities. Of these various subdivisions, only the advance base program is less than 75 percent complete.

Work on the huge non-industrial facilities program, that is, direct Navy work, has been carried on at a rate five times as fast as normal peacetime construction under federal auspices. It is pointed out that this entire naval program has progressed as rapidly as the fastest 5 percent among the peacetime projects.

Large graving docks are one of the most difficult shore installations to build. Prior to Pearl Harbor, construction of these docks averaged 50 months each. Since Pearl Harbor, the average has been cut to 22 months. Before the war, the naval air station at Alameda, Calif., required 39 months to complete. The Kaneohe air station in Hawaii, which was begun in 1939, required 19 months. In 19[illegible] the air station at Hutchinson, Kan[illegible] was hurried through in 2¼ months; Memphis, Tenn. (with 4,000,000 cu. of earth to be moved) in 4 months.

Two war-born types of construction floating drydocks and pontoons. Construction of the docks, some of them capa[illegible] of handling the largest battleships, be[illegible] late, but in the first half of 1942, do[illegible] with a lifting capacity of 6,000 tons w[illegible] completed. In the first half of 1943, total lifting capacity of docks comple[illegible] was 255,000 tons. In the first half of 19[illegible] the Navy produced 1,920 pontoons, [illegible] two years later, in the first half of 19[illegible] more than 14 times that many, 27,9[illegible] were completed. In all, nearly 85,000 these pontoons, used as lighters, f[illegible] barges or bridges, have been produc[illegible]

Rear Admiral Ben Moreell, is chief[illegible] the Bureau of Yards and Docks.

## Breaks in "Big Inch" fixed by welded patches

Oil is again flowing through the 86-mile main branch of the "Big Inch" crude oil pipeline between Phoenixville, Pa., and Linden, N. J., in which 44 weld breaks were discovered, 32 of which were in the 44 miles between Phoenixville and the Delaware River. Acting Petroleum Administrator for War, Ralph N. Davies, has announced that there have been no more breaks since the repaired line was put in operation Oct. 11.

It is understood that the eastern leg of the line, whose failure (ENR, Aug. 26, 1943; p. 314) created much ado when it caused oil to flow over the countryside and in people's yards, had not been tested with water before oil was pumped into it. All the southern line of the "Big Inch" had been so tested and, since it had proved to be satisfactory, it was taken for granted that the remainder of the line would prove equally tight.

In the case of the first few breaks, the defective pipe was cut out and new put in, but as the breaks began to multiply, this method was discarded in favor of the faster method of repair by welding on patch plates. The pipe was fabricated with arc welded seams, and the breaks occurred by the opening of these seams, for lengths of from one to fourteen feet.

The fact that pipe was furnished by more than one manufacturer apparently was not taken into consideration. All that failed was made by a single firm. One government spokesman, who has been observing the situation, is of the opinion that the manufacturer's welding equipment was inadequate to turn out pipe of so large a size, 20 in. dia. On the other hand, thousands of feet of weld in the same leg of the line, and made by the same company that manufactured the defective pipe, have not broken. Random trials showed many to hold up despite pressure far in excess of the 750 lb. test pressure regularly used. In one such trial, the pipe stood up against a pressure of 1,800 lb., which broke the pump rather than the pipe.

In its present repaired condition, the eastern leg of the line is pronounced by War Emergency Pipe Lines, Inc., to be safe for pressures up to 600 lb. In order to stay on the safe side, however, actual pressure will be held down to 450 lb. Ultimate testing pressure was 750 lb. at Phoenixville, plus static head at the Delaware River, where water for testing had been pumped into the line, which brought pressure up to as high as 920 lb.

The line between the two eastern cities is now capable of handling about 170,000 bbl. of oil a day. Though present capacity from Texas to Norris City, Ill., is 300,000 bbl. the capacity from Norris City to Phoenixville will continue to be limited to 215,000 bbl. until the completion of booster stations about the first of November. Delay in shipments of valves and equipment has delayed completion of these pumping stations.

• • •

## Modular planning followed for New York building job

A standard module of 4 in. is being used in preparing plans for a large post-war building project for New York City, according to A. Gordon Lorimer, chief of the bureau of architecture, New York City Department of Public Works. The project is a $6,000,000 hospital development to be started soon after the [illegible] ends. Plans for a still larger New Y[illegible] building project for the postwar per[illegible] will be prepared in a like manner w[illegible] this work starts, Mr. Lorimer reports.

Modular planning requires that all [illegible] mensions of a structure be a multiple [illegible] a standard unit. In this case the [illegible] module is used.

Advantages of the modular design a[illegible] the reason for its adoption were explain[illegible] last week at a New York meeting attend[illegible] by about 125 architects, structural [illegible] gineers, and clay products manufacture[illegible] The meeting, which was sponsored by [illegible] Structural Clay Products Institute, w[illegible] planned to announce a contest open[illegible] members of Mr. Lorimer's staff to det[illegible] mine the best design for a full-scale d[illegible] play of modular masonry.

The display or exhibit is to dem[illegible] strate the relationship for exterior bri[illegible] brick back-up, structural tile back-[illegible] double-hung windows, casement or pr[illegible] ect sash, door frames, and use of sta[illegible] ard machine-made shapes and trim.

Several important advantages for m[illegible] ular planning were made known at t[illegible] meeting. These included: less desi[illegible] work, simplified working drawings, m[illegible] economical use of materials, more ra[illegible] construction, fewer mistakes because l[illegible] ter checking is permitted, and re-use [illegible] detailed drawing for future projects.

Manufacturers at the meeting [illegible] plained that they favored the change [illegible] modular planning at this time. Most m[illegible] ufacturers are now employed on w[illegible] production and after the war will ne[illegible] to shift to other work, it was explain[illegible] In making this shift, changes could [illegible] made to manufacture products of dim[illegible] sions most satisfactory for modular pl[illegible] ning.

# nstruction Communiques

## Engineering News from the Battlefronts

ly—"The crossing of the Volturno in October was in itself an epic won by the bravery of combat en- who rowed and swam across it a heavy artillery barrage to build on bridges for the troops and tanks guns to follow."—N. Y. Times edi-

ily—Referring to the closing days e Sicilian campaign, Helen Kirk- k, Chicago Daily News correspond- wrote, "Every mile of advance in had to be made over country d by all types of German mines, bridges across Sicily's deep ravines up, and huge rocks blocking the

more than one place, the north coast was blasted almost out of existence hat it looked impossible to get gh, but the Army's advance went on, ks to the incredibly superb work of ngineers."

w Guinea—Allied Headquarters re- y paid high tribute to the United s Army's amphibian engineers, who d a vital role in the victorious maua-Lae campaign, said an A. P. tch.

was the amphibian engineers who invasion craft along 200 miles of the nese-controlled New Guinea coast ssist in landing an Australian force he final drive on Lae.

The hazardous undertaking," Head- rters statement said, "was performed such clock-like precision that every e, with the Japanese, landed and departed tly on schedule under its own power. two damaged barges were beached repaired.

Under the noses of Japanese guns unloaded twenty-five pounders which Australians used to pound Lae into devastation."

he Solomons—The following infor- on is from a recent United States s news dispatch from the South fic:

merican engineering genius, backed he courage, hard work and efficiency e Navy's volunteer construction bat- ns—the Seabees—and the Army En- ers, is transforming jungle islands e Pacific into big bases to support inued blows against Japan.

n New Georgia, Seabee outfits and neers, operating with bulldozers, tors, and other modern heavy equip- t, tore into the mud and jungle to d roads and installations long before positions were secured by the fighting es and despite heavy Jap air attacks.

Shell and bomb-ravaged Munda airfield was in operation on the eighth day after its capture, although the Japs had been unable to operate from it for several months. While fighters and cargo planes use the field constantly, Seabees are at work lengthening and improving it.

A little over a year ago, Guadalcanal was a tropical island of jungles and coconut plantations, with a partly completed airfield over which a bitter, bloody battle was being waged. Today, it is a teeming beehive of military activity—an advance base for the support of air, naval and amphibious operations.

The field, which the Japs had started when American Marines landed on Aug. 7, 1942, was being operated by the Americans within a few weeks. Today the traffic in heavy, medium and light bombers, fighters, observation and cargo planes operating from Henderson Field probably is greater than that handled by any commercial airfield in the United States.

**Vella Lavella**—Before the smoke of a bombing and strafing attack had cleared away, a battalion of Seabees at Vella Lavella in the Solomons—without need of orders—rushed in to man the stations of the fallen gun crews of a tank landing ship while their mates continued to discharge cargo without interruption.

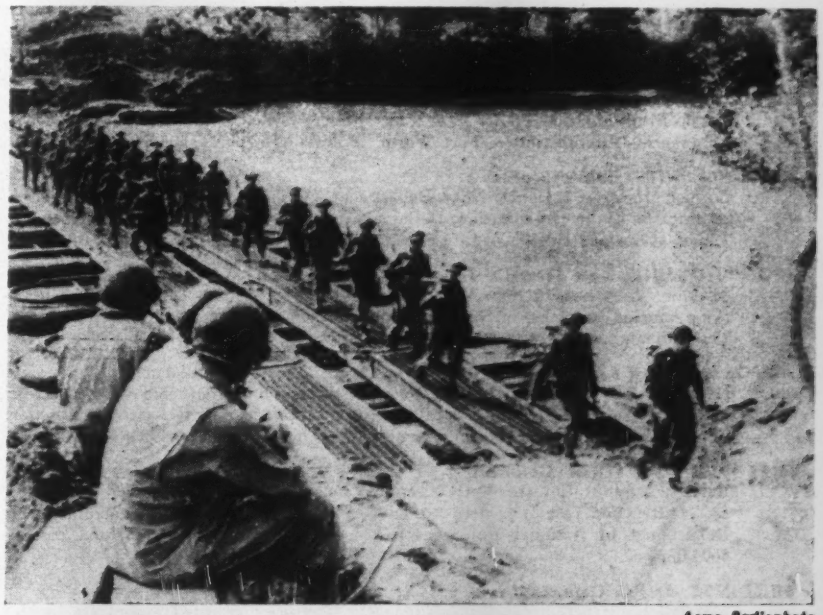
In a report on the action Lieutenant B. W. Robb, D-V(G), USNR, commander of the ship declared: "The calm words of an action report are inadequate to express this command's admiration of the working and fighting qualities of the Construction Battalion."

The report describes how enemy planes came in fast, straight at the LST's.

"Six planes released at about 800 feet on this ship. One plane in flames veered off to crash in the jungle. Fifteen bombs landed near the ship; none farther away than one hundred yards. The deck was covered with coral fragments which were two inches deep in some places and ranged in size from pebbles to chunks weighing 100 pounds and over. On the main deck all men were downed. Eight guns were out of commission with the other guns so filled with coral dust that they could not have been fired.

"While the dust and smoke of the explosions still covered us, the men of the Seabees came aboard to assist us. No orders were given them and no orders were necessary. Gray headed veterans of the last war manned gun stations, cleaned guns, and cared for the wounded. On the cargo deck the Seabees continued to discharge cargo without interruption . . . The ship and crew were ready and waiting for further enemy contact within 10 minutes of the last attack. Neither men nor material failed us until actually knocked out.

"No man can be singled out as having performed his duty with more merit than his fellows. All officers and men carried out their duties in accordance with the highest traditions of the Service."



Acme Radiophoto

**American engineers bridge the Volturno**

*Engineers of the American Fifth Army (three of whom are seated at the left) assisted the British Eighth Army in crossing the Volturno River in Italy by bridging that stream in advance of the arrival of the British troops. Many crossings were made under fire.*

# JOBS OF THE WEEK

***PLANT, Connecticut***
Edwin Moss & Son, Inc., Bridgeport, Conn., has been awarded a contract to build an assembly plant addition for Chance-Vought-Aircraft Division, Stratford, at an estimated cost of $1,500,000. John W. Ryan Construction Co., Inc., New York, N. Y., has been awarded the contract to alter laboratory, at $187,000. Defense Plant Corp. will finance. Albert Kahn Associate Engineers and Architects, Detroit, Mich., are engineers and architects.

***PENICILLIN PLANT, St. Laurent, Que.***
Foundation Co. of Canada, Ltd., Montreal, Que., will construct a plant to manufacture penicillin for the Dominion Government, Ministry of Munitions and Supply, Ottawa, Ont. The estimated cost is to exceed $500,000. Ross & MacDonald, Montreal, Que., are the architects.

***HOUSING, Nebraska***
Steenberg Co., St. Paul, Minn., was the lowest bidder at $709,800 for constructing housing and community building when the Public Housing Authority, Kansas City, Mo., opened bids. Leo Daly, Omaha, Neb., is the engineer.

***HOUSING, California***
Housing Authority of the City of Oakland received the lowest bid from Standard Building Co., San Francisco, Calif., for dwelling units, at $1,343,579. John J. Donovan, Berkeley, is the architect.

***HOUSING, Illinois***
B-W Construction Co. and Sherry Richards Co., Chicago, Ill., were low bidders at $7,597,000 when the Public Housing Authority, Chicago, opened bids for housing. Shaw, Naess & Murphy, Chicago, Ill., are the architects.

***HOUSING, Ohio***
Caristo Construction Corp., Brooklyn, N. Y., has been awarded a contract for a housing project by the Public Housing Authority, Cleveland, O., at $1,212,000. E. J. Conrad and Associates, Cleveland, O., are the architects.

***HOUSING, Oregon***
Portland Housing Authority, Portland, Ore., awarded a contract for housing units to Wegman & Son, Portland. The estimated cost is $2,250,000. Public Housing Authority will finance.

***PENITENTIARY, Monterrey, Mexico***
State of Nuevo Leon, Monterrey, will construct a 2-story penitentiary with towers, to cost $893,000. Antonino Sava, Monterrey, has been awarded the contract to build. Bonifacio Salinas Leal is the governor.

***HOUSING, California***
Moore & Roberts, San Francisco, Calif., are the lowest bidders for dwellings, at $2,819,523. Public Housing Authority, San Francisco, Calif., opened bids.

***AIRPORT, El Paso, Tex.***
Texas Bitulithic Co., Dallas, Tex., has been awarded a contract by the Civil Aeronautics Administration, Fort Worth, to develop airport, at a cost of $717,205.

***HOUSING UNITS, United States***
Bureau of Yards & Docks, Navy Department, Washington, D. C., has awarded a contract to Byrne Organization, Dallas, Tex., for housing units for transient personnel at various locations. Cost is estimated at $1,300,000.

***TROOP HOUSING, New Jersey***
Andrew Christensen & Sons, Elizabeth, N. J., have been awarded a contract for troop housing barracks, in Somerset County by U. S. Engineers, New York, N. Y. The estimated cost is $500,000.

***AIRPORT, Comax, B. C.***
Department of Transport, Ottawa, Ont., will develop an airport, including clearing, stumping, grubbing, stripping, grading, rolling, drainage, etc. General Construction Co., Ltd., Vancouver, B. C., is the contractor. The estimated cost is $900,000.

***IMPROVEMENTS, British Columbia***
Bennett & White Construction Co., Ltd., Vancouver, has been awarded a contract for construction, grading, hard-surfacing and drainage at S.F.T. school by The Department of National Defense for Air, Ottawa, Ont. The estimated cost is $604,000.

***BUILDINGS, British Columbia***
Marwell Construction Co., Ltd., Vancouver, has been awarded a contract by the Department of National Defense for Air, Ottawa, Ont., for barracks, mess halls, land plane hangers, trainer buildings, office workshop, etc. The estimated cost is $822,000.

**Note—Additional bidding and contract news on many projects large and small appear in the Construction News section beginning on page 14.**

## *N. Y. City gets $418,000 f... postwar planning*

The Post-War Public Works Plann... Commission has announced the allo... tion of $418,000 to New York City ... $37,775 to other communities in the s... as half the cost of preparing plans ... public works to be undertaken after ... war.

Such projects in New York, ... listed with the commission, will cost $... 353,422 to complete and, in other c... munities, $2,770,000. The state does ... share in the construction costs. ... projects in New York City number 7...

Including allocations previously m... by the commission, 833 projects for ... one communities are being planned un... this program at an estimated cons... tion cost of $44,210,022.

• • •

## *Malcolm Pirnie nominat... to head the A.S.C.E.*

Malcolm Pirnie, consulting engine... New York, was named as the offi... nominee for pre... dent of the Ame... can Society of C... Engineers at ... meeting of the ... ciety's nominati... committee held ... Atlanta, Oct. ... Being named as ... official nominee ... tantamount to el... tion. Election to... place at the annual meeting of the soci... in January. Mr. Pirnie served the soci... as a director, 1928-30, and as a v... president, 1939-40.

Mr. Pirnie was born in New York ... 1889, graduated from Harvard as a c... engineer in 1911. For many years ... was associated in consulting work w... the late Allen Hazen. In addition to ... consulting work he is now serving as ... member of the technical advisory co... mittee to the War Production Board.

• • •

## *Construction to proceed ... on Wisconsin River brid...*

With the recent lifting of restricti... by the War Production Board, work w... restart on the construction of a $3... 000 bridge to span the Wisconsin Ri... on State Highway 130, near Lone Ro... Wisconsin, according to a report by G... ernor Goodland of Wisconsin. Frank ... Theringer, WPB regional representati... at Chicago, advised Goodland that t... board had cancelled a suspension or... designed to conserve steel.

## OBITUARY

**k M. Carroll,** 67, president of the Construction Co., Chicago, died 6 at Evanston, Ill. Prominent in ctural and engineering work in go for the past 40 years, Mr. Carad done considerable construction n many of the city's largest hotels ice buildings. His early work was bridge and building department St. Paul Railroad, following which ed the firm of Holabird & Root, o architects, in 1904. Eventually came general superintendent in of construction for the firm, until when he established his own con- on company.

**uel W. Saylor,** 62, general superinit of the O. F. Paulson Construc-. Cedar Rapids, Ia., for 20 years, his home in that city recently.

**in O. Klann,** 57, a civil engineer for of Milwaukee for 25 years before irement 10 years ago, died Oct. 18,

**n Robert Ney,** 65, construction ntendent for A. W. Robertson, Ltd., l contractors of Toronto, Ont., and gus Robertson, Ltd., of Montreal, n Toronto on Oct. 11, only three fter his return to his home from a of service on the Alaska Highway.

**mas Hall,** 81, of Montreal, Que., nown in shipbuilding and Marine ering circles, died Oct. 11.

**ge E. McMeans,** 74, died at Indian- Ind., recently. He was head of gineering firm of McMeans & Tripp nsulting engineer for several state tions.

**mas Murphy,** 40, died at Morgan- W. Va., Oct. 15. He organized a ction company in 1927 and be- prominent in road construction in Virginia, Pennsylvania, Ohio, Vir- and Kentucky. For the last two his activities were confined almost ively to airport construction for the Air Forces.

**L. Williford,** 55, of Dallas, Tex., Houston assistant city engineer, ct. 21. He was with the Houston ering department from 1911 until hen he moved to Dallas and was ident engineer for the State Highept. there until his death.

**imer M. Cloudman,** 72, president Elgin, Ill., sanitary district of he was an organizer and a trustee continuously since 1922, died Oct. 16. Mr. Cloudman was president of the Illinois Association of Sanitary Districts in 1936.

**Stanley Farquharson,** 43, well-known civil engineer and senior engineer with Stephenson and Kellogg, Limited, Montreal, Que., died Oct. 20. Born at Christchurch, New Zealand, Mr. Farquharson came to Canada in 1920. In 1924, he went to Montreal, where he was one of the founders of Farquharson, Goforth, civil engineers. He later accepted the position of senior engineer with the Stephenson and Kellogg concern, a position which he held until his death.

**Rowland Campbell,** 48, head of the Campbell Engineering Co., Appleton, Wis., and one time president of the old Reo Motor Car Co., died Oct. 19.

## *Pennsylvania coal firm plans to reclaim silt*

Within a few weeks one large Pennsylvania anthracite colliery will cease discharging its coal washing water into the Schuylkill River, a practice of long standing that has brought water supply troubles to cities down stream and recently resulted in court action designed to bring it to an end. (*ENR* June 10, p. 850).

A pilot plant for experimental purposes installed several months ago at the Lansford colliery of the Lehigh Coal & Navigation company has proved so successful that a full-size plant is being erected at the company's Tamaqua breaker. The water from this breaker flows directly into the east branch of the Schuylkill.

# CONTRACTS AND CAPITAL

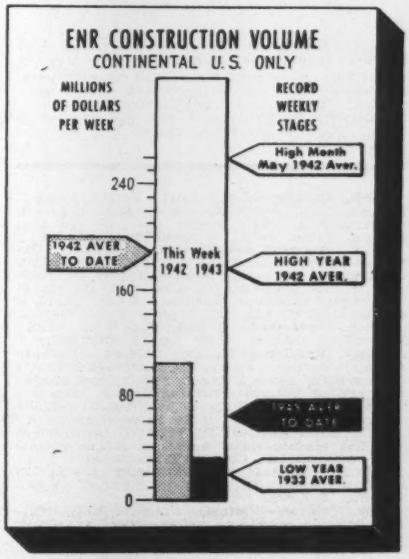
CIVIL ENGINEERING construction volume in continental U. S. totals $31,985,000 for the week. This volume, not including construction by military engineers abroad, American contracts outside the country, and shipbuilding, is 37 percent lower than in the preceding week, and 69 percent below the total for the corresponding 1942 week.

Private construction is down 40 percent compared with a week ago, and 41 percent lower than a year ago. Public work is 36 and 71 percent lower, respectively, than last week and last year.

The current week's construction brings 1943 volume to $2,681,752,000, an average of $62,366,000 for each of the 43 weeks. On the weekly average basis, 1943 construction is 67 percent below the $8,324,585,000 for the 44-week 1942 period. Private construction, $376,904,000, is 25 percent under a year ago, and public work, $2,304,848,000, is down 70 percent when adjusted for the difference in the number of weeks.

In the classified construction groups, gains over last week are in waterworks, sewerage, bridges, and industrial buildings. Increases over the week last year are in bridges, and commercial building and large-scale private housing.

New capital for construction purposes for the week totals $656,000, and is made up entirely of state and municipal bond sales. New construction financing for 1943 to date, $3,043,250,000, is 67 percent below the $9,555,998,000 reported for the 44-week period in 1942.




### CONTRACTS

**Continental U. S. Only**
**(Thousands of dollars)**

| | Week Ending Oct. 29 1942 | Oct. 21 1943 | Oct. 28 1943 |
|---|---|---|---|
| Federal | $89,750 | $40,216 | $23,780 |
| State & Municipal | 6,045 | 3,206 | 3,777 |
| Total public | $95,795 | $43,422 | $27,557 |
| Total private | 7,487 | 7,333 | 4,428 |
| TOTAL | $103,282 | $50,755 | $31,985 |
| Cumulative 1943 (43 weeks) | | | $2,681,752 |
| 1942 (44 weeks) | | | $8,324,585 |

Note: Minimum size projects included are: Waterworks and waterways projects, $15,000; other public works, $25,000; industrial buildings, $40,000; other buildings, $150,000.

### NEW PRODUCTIVE CAPITAL

| | Cumulative 1942 44 weeks | 1943 43 weeks |
|---|---|---|
| NON-FEDERAL | $589,100 | $289,412 |
| Corp. Securities | 170,489 | 18,228 |
| State & Mun. | 205,456 | 105,506 |
| R.F.C. loans | 130,455 | 14,545 |
| FPHA loans | ..... | 3,133 |
| R.E.A. loans | ..... | 20,000 |
| Fed.-Aid Hwy. | 82,709 | 128,000 |
| FEDERAL | $8,966,898 | $2,753,838 |
| TOTAL CAPITAL | $9,555,998 | $3,043,250 |

### ENR INDEX NUMBERS

| Index Base=100 | | 1913 | 1926 |
|---|---|---|---|
| Construction Cost | Oct. '43 | 294.31 | 141.47 |
| Building Cost | Oct. '43 | 231.29 | 125.03 |
| Volume | Sept. '43 | 155 | 68 |

# CONSTRUCTION REPORTS

**Compiled by Business News Department—Engineering News-Record, 330 W. 42nd St., New York**
**ELSIE EAVES, Manager** **SCOTT McLEOD, Statistician**
**(Daily service also available—Write for details)**

## WATER SUPPLY

### PROPOSED WORK

**Kan., Coffeyville**—J. D. Byers, mayor, City Hall, dam for water reservoir, $35,000. Will apply for FWA funds. Black & Veatch, 4706 Bway., Kansas City, Mo., engrs. CD 10/12—ENR 10/14.

**Mich., Riverview**—Village, preparing plans 12 in. watermain in Pennsylvania Ave. Pate & Hirn, 532 Michigan Theatre Bldg., Detroit, engrs.

**Mont., Great Falls**—E. L. Shields, mayor, City Hall, 5 m.g. reservoir, $313,000. Federal funds sought. Black & Veatch, 4706 Bway., Kansas City, Mo., engrs. CD 6/30—ENR 7/8.

**Pa., Greenville**—Municipal Auth., Boro of Greenville. W. Insull, in charge, Northeastern Water & Elec. Service Corp., Latrobe, bids soon filtration plant imprvs., 30x120 ft., rein.-con. sedimentation basin. 1 story, 30x30 ft., mixing chamber, 3,700 ft. 8 and 12 in. c.i. watermains. Morris Knowles Co., 1312 Park Bldg., Pittsburgh, engr.

★**Tex., Dallas**—H. Hunter, city supt., watermains facilities. $600,000.

★**Tex., Texas City**—Galveston County Water Control & Imprv. Dist. 5, c/o L. Paul, Court House, Galveston, water distr. facilities from San Jacinto River to various plants and industries, vicinity of here. $500,000.

**Tex., Weatherford**—C. F. Russell, mayor, City Hall, WW imprvs. $23,500. Applied for FWA funds. Clarkson, Pilieh, Geren & Rady, First National Bank Bldg., Fort Worth, engrs.

★**†Va., Norfolk**—Dpt. P. Wks., preliminary plans addnl. water distr. facilities, $1,239,000. **FWA.**

**Wis., Chilton**—O. Horst, city clk., bids soon 3 test wells, watermain collection lines, pumps, pump houses, etc. A. E. McMahon Eng. Co., Menasha, engr.

**Wis., Manitowoc**—City, A. Post, clk., 6 m.g. daily capacity horizontal type well at Lake Shore.

### BIDS ASKED

*Bids Asked November 2*

**Ind., Switz City**—J. Smith, town clk., City Hall, WW completion, incl. 24,371 ft., 2 to 8-in. c.i. pipe, 29 gate valves and boxes, 16 fire hydrants, service connections. $30,000. Plans deposit $10. T. T. Hardman, 2100 S. Center St., Terre Haute, consult. engr.

*Bids Asked November 9*

**Miss., West Point**—City, c/o Mayor, City Hall, well at City Light & Power Plant. $15,000.

### LOW BIDDERS

**†S. C., Hampton**—City, Oct. 19, WW exten., S.C. 38-222, from Deconynck & McDaniel, P. O. Box 1265, Columbia, **$24,231. FWA.** CD 10/5—ENR 10/7.

**†Tenn., Columbia**—City, E. Denham, mayor, Oct. 12, WW plant addn., exten. from M. T. Reed Constr. Co. 1305 Deposit Guaranty Bldg., Jackson, Miss., **$118,928. FWA.** CD 10/6—ENR 7/15.

### CONTRACTS AWARDED

**Calif., Napa**—City, City Hall, Westside distr. reservoir, 1½ m.g.c., to H. Smith, 1427 Kearny St., St. Helena, **$14,190.** Bids 10/18. CD 10/11—ENR 9/2.

**Ia., Des Moines**—WW imprvs., incl. pump house. and intake for reservoir, to Kramme & Jensen, Teachout Bldg., **$24,340.** Bids 10/12. CD 10/5—ENR 10/7.

**†Maryland**—U. S. Eng., 1 and Douglas Sts. N.W., Wash., D. C., installing 16 in. water line, to Leo Butler Co., 8416 Georgia Ave., Silver Spring, **$178,500.**

**†Minn., Minneapolis**—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., water supply and addnl. aviation facilities, Fleming Field, NAS, NOY 6551, to Naugle-Leck, Inc., 522 Roanoke Bldg., **$188,332.**

**Mont., Shelby**—B. McNamee, city clk., City Hall, WW imprvs., water tanks, to J. Sterhan, Glendive, **$31,483;** c.i. watermains, to E. Johnson, Glasgow, **$21,097.** Bids 10/8. Corwin & Co., Fort Bldg., Great Falls, engr.

**†N. Y., Greenport** — Village Clerk, Village Office, wells, pump. plants, delivery lines, etc., East Marion Dist., northeast of here, NY 30-142, to C. W. Lauman & Co. Inc., 50 Church St., New York, **$15,632. FWA. Bids 10/15.** CD 9/29—ENR 10/7.

**†Va., Fort Belvoir**—U. S. Eng., 1 and Douglas Sts. N.W., Wash., D. C., imprv. water treatment plant, to F. H. Martell Co., 920 17 St. N.W., Wash., D. C., **$20,000.**

Location of ENR Correspondents

*Symbols and Abbreviations Include:*

| | |
|---|---|
| † | Federal Government |
| ★ | Project of $500,000 or over |
| ENR | Engineering News-Record |
| CD | Engineering News-Record Construction Daily |
| A-E-M | Architect-Engineer-Management type of contract |

*Projects—By Size*

Construction projects here reported cover the United States and Canada, are of these minimum sizes or larger: water supply, earthwork, waterworks, $15,000; other public works, $25,000; industrial buildings, $40,000; other buildings, $150,000.

*Classes of Construction*

(Named in order of Listing)

| | |
|---|---|
| Water Supply | Unclassified |
| Sewers, Waste Disposal | Latin America |
| Bridges | Public Buildings |
| Streets & Roads | Commercial Buildings |
| Earthwork, Waterways | Industrial Buildings |

*Stages Reported*

PROPOSED: (except Streets & Roads):

BIDS ASKED (new announcements only. For full calendar, see also preceding issues of ENR);

LOW BIDDERS: On jobs below $500,000 value all low bidder news will be the final reports published on the projects involved except where award is not made to the low bidder. In this case, a supplementary contract award report will be published.

CONTRACTS AWARDED: Except awards to low bidders previously reported in low bidder stage.

Dates shown are of issue in which last previous report was published.

**Note:** To comply with censorship requirements, addresses on some reports are being generalized. Data which would reveal the purpose of the improvements and the size are withheld. The name of contractor and general area are reported.

**Alta., Calgary**—Dpt. Natl. Defense (Air), Ottawa, Ont., water storage at Repair Depot, to Bennett & White Constr. Co. Ltd., Toronto General Trust Bldg., 8 Ave. West, **$31,000.**

**B. C., Dawson Creek**—Dpt. Transport, Ottawa, Ont., preliminary work in connection with water distr. and sewerage sys., to Bennett & White Const. Co. Ltd., 510 W. Hastings St., Vancouver, **$55,000.** Awarded 10/5. CD 8/20—ENR 9/2.

**N. S., Liverpool**—Mersey Paper Co., Ltd., Liverpool, pipeline, own forces. **$50,000.**

**Ont., Barriefield** — Dpt. Natl. Defense (Army), Ottawa, water and sewerage services incl. sewers, sewage disposal plant and sludge bed, etc. at Officers' Training Centre, to Holdcroft Constr. Co. Ltd., 183 William St., Kingston, **$33,000.** CD 9/1, under Sewers, etc.

**Ont., London**—Dpt. P. Wks., Ottawa, sewers, fire mains, water services, steam mains, for Occupational Colony Units 1 and 2, at Military Hospital, Westminister Twp., to Redfern Constr. Co., Ltd., 30 Bloor St. West, Toronto, **$78,000.**

**Ont., Malton**—Victoria Aircraft Ltd., Malton, outside services, waterworks, at plant, to Scott-Jackson Const. Ltd., Evans Ave., New Toronto, **$56,000.**

## SEWERS, WASTE DISPOSA

### PROPOSED WORK

**Ind., Richmond**—Bd. P. Wks., J. R. Bro mayor, City Hall, preliminary plans, sa sewer between S. L. & I Sts., and 3 a Sts. $100,000. S. W. Hodgin, city engr

**O., Cleveland**—S. F. David, dir. Pub. S City Hall, replacing 280 ft. 90 in. and rebuilding 100 ft. of 6 ft. 3 in. sewer. $25,000. J. C. Wenrick, City Hall, engr.

**O., Fairfield**—Village, brick, concrete erator plant, $37,000. R. T. Patrick, Bldg., Dayton, engr.

**†R. I., Newport**—City, sanitary se Private Way crossing Beacon and Sts. $80,000. **FWA.**

**Mich., Grosse Pointe Woods**—Village paring plans storm water pump station, water sewers. Pate & Hirn, 532 Mich Theatre Bldg., Detroit, engrs.

★**Tex., Dallas**—H. Hunter, city Waterworks & Sewers, sanitary mains, facilities (primarily in Western Cliff Sect.). $900,000.

### BIDS ASKED

*Bids Asked November 1*

**N. Y., Kew Gardens**—President Boro, Queens Boro Hall, 120-55 Queens combined sewers, appurtenances, Union pike, Parsons Blvd., Tryon Pl., 89 Dr., fries Pl., 159, 160, 161, 152, 170, 164, Sts., 3rd Ward; sanitary sewer, appu ances, Baisley Blvd., 119 Rd., 189, 15 Terry Sts., 4th Ward; 9 Ave., 3rd W seepage basins, on northeast and nort corners 233 St. and 131 St., 4th Ward; appurtenances, 23 Ave., 97 and 98 Sts. bined sewer, appurtenances, 82 Rd., 7 79 Sts., both in 2nd Ward.

*Bids Asked November 5*

**†Tex., Cuero**—J. T. Newman, mayor, Hall, 13,600 ft. 6 to 8 in. vitr. sewer well, pump house and sand trap, etc. Tex 610. **FWA.** Plans deposit $25. Terrell lett Engineers, Transit Tower, San Ant engrs. CD 10/14, under BA.

*Bids Asked November 17*

**†Tex., Pasadena**—Federal Works Ag Electric Bldg., Fort Worth, sewer Tex. 246A, $267,700; W. W. $265,000. Plans posit $25 ea. proj. Garrett Engr. Co., Milam St., Houston, engrs.

### LOW BIDDERS

**Colo., Lakewood**—Lakewood Sanitation Oct. 21, 80,000 lin. ft. 6-to-12-in. vitr. sanitary sewer line, from Artukovich Hynds, Calif., **$377,825.** Est. $350,000. 10/8.

**Michigan**—State Hy. Dpt., Lansing, Oct storm water pump. sta. for Detroit Ind Ex., incl. mechanical and electrical e complete, SN-21-FD1 of 32-22 at Sch and Butler Rds., Dearborn, Wayne Co., E. C. Nolan & Son, 8121 Warren Blvd., terline, **$49,360.** CD 10/7.

**Mich., Lansing**—State Hy. Dpt., La Oct. 20, storm water pump. station for troit Industrial Expressway, near Irving Dearborn, Wayne Co., from E. C. Nola Son, 8121 Warren Blvd., Center Line, $41 CD 10/12—ENR 10/14.

**Pa., Allentown**—City, Oct. 20, vitr. sew manholes, etc., Sanitary Sewer Dist. 32, Christ Donatelli Co., 325 Summer Ave., 402.

**†Rhode Island**—Pub. Housing Auth., N 24 School St., Boston, Mass., Oct. 20, sew disposal plant, sewerage sys., for hou RI 37050 and 37022, from R. Zoppo, Ramsdell Ave., Roslindale, **$68,400.** CD —ENR 10/7.

### CONTRACTS AWARDED

**†Arizona**—U. S. Eng., 751 S. Figueroa Los Angeles, 14, Calif., sewage disposal sewer lines, Contr. No. 509-eng-3612. Mar Co., to Vinson & Pringle, S. 19 Ave., Pha **$80,000.**

**†Georgia**—U. S. Eng., Post Office Savannah, storm drainage sys. re addns., Contr. 819-eng-1675, Chatham Co. Espy Paving & Constr. Co., 108 E. Bay Savannah, **$40,000.**

**†N. Y., Liverpool**—Town Board of Tow Salina, at office, Liverpool, Contr. 1, co tion portion of Mattydale sewerage sys. of Brewerton Rd., N. Y., 30-242, Salina. Mizpanarelli & Pagliochini, 501 Tennessee N.E., Wash., D. C., **$74,305. FWA.** Bids CD 9/28—ENR 9/30.

**†Oklahoma**—U. S. Eng., 416 Wright Tulsa, Zone 2, sewage treatment plant,

...gs etc. (Contracts Awarded, Cont'd.)

...-44-74, Canadian Co., to Lippert Bros., ... Bldg., Oklahoma City, **$35,200.** (Cer- ...location). CD 10/12—ENR 10/14, CA.

**...Memphis**—W. Chandler, mayor, City ... mi. lateral sewer addn., Interceptor ...Addn., Sec. 3-A, **FWA Tenn 40-242 NF,** ...rcum-James Co., 1489 Thomas St., ... CD 10/15—ENR 10/21 under LB.

**... Corpus Christi**—Yards & Docks, Navy ... St. and Constitution Ave. N.W., Wash., ...sewer connection, N A T T C, Ward ...NOY 7512, to Arkin & Hinman Constr. ...rpus Christi, **$31,200.**

**... Ingersol**—North American Cyanamid ...ngersol, river diversion, to J. N. Pitts ... Co., Ltd., 38 Commercial St., Leaside.

## BRIDGES

### ...OSED WORK

**... San Juan Capistrano**—Orange Co., ...House, Santa Ana•bridge over San Juan ...$34,000. D. R. Warren, Architects Bldg., ...geles, engr.

**... Logansport — Bd. Comrs. Cass Co.,** ...Barnett, and., Court House, rein.-con. ...over Deer Creek, on Young America ...$50,000. Jas. H. Chase, Court House, ...r.

**... Middlesex**—Middlesex and Somerset ...s. County Record Bldg., 71 Bayard ...w Brunswick, 84 ft. timber bridge, 23 ...e, dredging Green Brook construction ... for bridge approaches. $25,000. Geo. ... Co., County Record Bldg., engr.

### ...ASKED

*Bids Asked November 2*

...—State Hy. Comn., Ames, maintenance ...cing 4.1 mi. Iowa 2, M-4271, Decatur ...aintenance cover aggregate, stockpiles ...u. yd. Iowa 51 from end of pavement ...of Postville to Iowa 13, M-2224, Alla- ... Co.; 430 cu. yd. Iowa 42, from Riverton ... 275, Fremont Co.; 1,140 cu. yd. Iowa ...m Guthrie Center, M-4273, Guthrie Co. ... White, Ames, ch. engr.

**... Carolina**—State Hy. Dpt., J. S. Wil- ...n, comr., Columbia, superstructure for ...ft. rein.-con., structural steel bridge ...ove Inlet, Route 703, near Mt. Pleasant, ... No. 10-264, Defense Access Proj. DA- ...A(2), Contr. 2, Charleston Co.

*Bids Asked November 3*

...is—State Div. Waterways, 201 W. Mon- ... Springfield, repairing substructure and ...tructure bridge over Illinois River, at ...La Salle Co.

*Bids Asked November 4*

...ado—State Hy. dpt., Denver, new ...ment, bridge, gravel surfacing 7.595 mi. ...41, between Whitewater and Gateway, ...A1 FAS 96-A(1), Mesa Co.

### ...BIDDERS

**... C., Wash.,**—Pub. Roads Admin., 1440 ...ia Pike, Arlington, Va., Oct. 19, Project ...Military Hy., bridge over Brand Ave., ...F. M. Arthur, Rescue, Va., **$78,064.**

**...igan**—State Hy. Dpt., Lansing, Oct. 13, ...separation (hy. underpass), incidental ...SN-N-FX 7 of 82-22-10C-2, Wayne Co., ...L. A. Davidson, 213 E. St. Joseph St., ...g. $469,533. CD 10/7.

**..., Renton**—Boeing Aircraft Co., George- ...ttation, Seattle, Oct. 15, floating bridge, ...te paving, piling, from Sound Constr. ...gineering Co., Northern Life Tower, ..., Zone 1, **$129,648.**

### ...RACTS AWARDED

**... Virginia**—State Rd. Comn., Charles- ...Muddy Creek Bridge 1681, approaches, ...n Co., to Fuccy Bros., Weston, **$64,961.** ...10/13. CD 10/11—ENR 10/14.

**...ec**—Province of Quebec, Quebec City, ...ft., rein.-con. bridge, approaches over ... Bleue, at Riviere Bleue, Temiscouata ... J. P. A. Normand, 7 Main St., L'Islet, ...5,000. CD 8/30—ENR 9/2.

**...ec**—Dpt. P. Wks., Quebec City, White ..., 3 spans 70 ft. each, 24 ft. wide, rein.- ...ver North River, near Lachute, on Hy. ...rgentieuil Co., to Emery Rene & E. ... St. Ambroise, **$30,733.** Bid 9/3. CD ...ENR 9/2.

**... St. Timothee**—Shawinigan Water & ... Co., Ltd., 107 Craig St., Montreal, 6 ft. ...crete culvert under St. Timothee canal, ...winigan Eng. Co., 107 Craig St. W., ...al, approx. **$152,000.**

## STREETS AND ROADS

### ...ASKED

*Bids Asked November 2*

...—State Hy. Comn., Ames, rein.-con. ...ulvert exten. and 1 rein.-con. box cul- ...xten. with concrete flume, incidental ..., on Iowa 31 southwest of Washta, ..., Douglas Twp., P-457, Ida Co.; 100 lin. ...crete retaining wall and concrete spill- ...on U. S. 18 and Iowa 13, southwest of ...gor, Sect. 28, Mendon Twp., FN-74; ... Co. F. R. White, Ames, ch. engr.

*Bids Asked November 3*

**Kentucky**—State Dpt. Hys., Frankfort, low type surfacing approx. 8.1 mi. access road to timber site, beginning 2½ mi. east of Walker and extend. 2½ mi. east of Mills, DA-RM-16, Knox Co.

**Louisiana**—D. Y. Smith, dir., Dpt. Hys., Baton Rouge, 300 cu. yd. washed gravel or 353 cu. yd. sand clay gravel furnished, spot dumped on Cockfield Land Montgomery Ferry Rd., St. Rt. 1173, S. P. 361-01-01 Natchitoches Parish; 5,000 cu. yd. washed gravel furnished, del. at various sidings, S. P. 703-00-53, Jefferson Parish; 8,000 cu. yd. local iron ore mined, hauled and spot dumped on certain roads, S. P. 703-00-55, Winn Parish.

**Louisiana**—State Hy. Dpt., Baton Rouge, shaping roadway, sand clay surfacing (Grade A) and plain concrete culvert pipe 0.7 mi. access road, SP 711-00-04, Defense Access Army Reservation Proj. DA-WR-29(1), Calcasieu Parish.

*Bids Asked November 4*

**N. Y., New York**—President Bronx Boro., Bronx County Bldg., 851 Grand Concourse, sheet asphalt on concrete repaving E. 145 St.; redressed granite block on concrete repaving E. 183 St.; sheet asphalt, granite block, asphalt block, and paving brick on concrete repaving Bruckner (Eastern) Blvd.

**Virginia**—State Hy. Dpt., Richmond, concrete paving 3.31 mi. Route 60 between Lynnhaven Inlet and Norfolk, Princess Anne Co. $200,000. J. M. Hagen, Norfolk, engr.

*Bids Asked November 5*

**Colorado**—State Hy. Dpt., Denver, gravel surfacing 35.1 mi. S.H. 141, between Whitewater and Gateway, Defense Access Rd. Proj. DA-RM-55, Mesa Co.

*Bids Asked November 12*

**California**—State Div. Hys., State Bldg., Los Angeles, plant mixed material on untreated rock base and plant mix material on existing pavement 4.1 mi. hy. between point 0.4 mi. north of Nauman Rd. and Calleguas Creek, Ventura Co.; grading, plant mix surfacing 4 mi. Waterman Tippecanoe and Cardiff Aves., Dist. VIII, San Bernardino Co.; plant mix surfacing 3.3 mi. Ocean Ave., Huntington Beach, Orange Co. G. T. McCoy, P. Wks. Bldg., Sacramento, state hy engr.

**Kentucky**—Dpt. Hys., Frankfort, grading, drainage, medium type surfacing 0.129 mi., North Sherrin Ave., beginning at junction US 60 and exten. to north side of Armory St. Matthews, SP 56-718, Jefferson Co.; grading, drainage and traffic bound surfacing 2.15 mi., Harrisonville-Lawrenceburg Rd., beginning at Harrisonville and exten. to Anderson Co. line, SP 106-286, Shelby Co.; repairing bridge over Green River at Neatsville and reconstruction approaches, Eunice-Neatsville Rd., SP 1-50, Adair Co.

*Bids Asked*

**Iowa**—State Hy. Dpt., Ames, rejected bids Oct. 19, maintenance resurfacing 14.8 mi. M-4270, Fremont-Page Counties; 2 mi. M-3299, Plymouth Co. Received no bids Oct. 19, imprv. hy. M-1271, Hardin Co., and Hy. M-1248, Tama Co. CD 10/12—ENR 10/14.

**†Maine**—U. S. Eng., 31 St. James Ave., Boston, Mass., (selected list bidders), roads, walks, No. 19-023-44—NEG 100.

**Utah, Salt Lake City**—W. D. Beers, city engr., City and County Bldg., rejected bids Oct. 13, imprv. area bounded by 23rd East St., Michigan Ave., Diestel Rd. and Sunnyside Ave. CD 9/22—ENR 9/30.

### LOW BIDDERS

**California**—State Div. Hys., State Bldg., Los Angeles, Oct. 14, imprv. 1.4 mi. Los Angeles and Orange Counties, from Owl Truck & Constr. Co., 420 S. Alameda St., Los Angeles, **$71,884.** CD 9/24—ENR 9/30.

**California**—State Hy. Dpt., State Bldg., Los Angeles, Oct. 14, imprv. 4.8 mi. San Diego Co., from V. R. Dennis Constr. Co., Box F, Hillcrest Sta., San Diego, **$33,597.** CD 10/6.

**California**—State Hy. Dpt., Sacramento, Oct. 19, imprv. 4.7 mi. Solano Co., from Piazza & Huntley, 175 S. Montgomery St., San Jose, **$87,875. CD 10/8.**

**Georgia**—State Hy. Dpt., Atlanta, Oct. 22, widening, resurfacing 10.418 mi., Newman-Atlanta Rd., Fulton Co., from W. L. Cobb, Decatur, Ga., **$215,484.**

**Ohio**—State Hy. Dpt., Columbus, Oct. 19, imprv. 4.154 mi. Montgomery Co., from Boyd & Cook Co., Gas & Electric Bldg., Dayton, **$172,888,** est. $164,000***0.49 mi. Summit Co., from Thorpe Const. Co., 109 N. Union St., Akron, Zone 4, **$67,925,** est. $54,700***0.852 mi. Trumbull Co., from Kane, O'Horo & Heanny, 65 W. Indianola Ave., Youngstown, **$97,719,** est. $90,200***1.576 mi. Guernsey Co., from Muskingum Valley Asphalt & Supply Co., 226 Masonic Temple, Zanesville, **$27,998,** est. $28,000***5.017 mi. Huron Co., from Ohio Road Improvement Co., 30 E. Broad St., Columbus, **$48,341,** est. $49,800***1.755 mi. Licking Co., from Newark Asphalt Products, Inc., W. Poplar Ave., Newark, **$24,594,** est. $24,650. Received no bids Oct. 19, imprv. 0.101 mi. Athens Co. CD 10/15.

**†Oregon**—Pub. Roads Admin., New P. O. Bldg., Portland, Oct. 12, 13.5 mi. timber access road, Douglas Co., from A. Milne Constr. Co., 7523 S.E., Bway., Portland, **$81,200.**

**Pennsylvania**—State Hy. Dpt., Harrisburg, Oct. 20, imprv. 1.02 mi. Chester Co., from Seaboard Constr. Co., 1528 Walnut St., Phila., **$81,964; 1.3 mi. Allegheny Co., from McCrady** Constr. Co., 239 F Ave., Pittsburgh, **$352,719.** CD 10/12—ENR 10/14.

**Texas**—State Hy. Comn., Austin, Oct. 19, imprv. 0.487 mi. Dallas Co., from Vilbig Constr. Co., Paris and Bourbon Sts., Dallas, **$39,370,** est. $40,000***1.225 mi. Orange Co., from Chas. C. Bellar, Anahuac, **$50,640,** est. $50,000***1.728 mi. Dallas Co., from Texas Bitulithic Co., P. O. Box 5297, Dallas, **$48,634,** est. $50,000. CD 10/13.

**Washington**—State Hy. Dpt., Olympia, Oct. 19, imprv. 15.9 mi. Yakima and Benton Counties from Goetz & Brennan, Seaboard Bldg., Seattle, Zone 1, **$263,070.** CD 10/14.

**Wisconsin**—State Hy. Comm., Madison, Oct. 13, imprv. 14.5 mi. S. T. Hy. 80, from H. Turner & Son, Boscobel, **$108,400;** 13.0 mi., S. T. Hy. 58, from Ed. Kraemer & Sons, Plain, **$132,480,** both Richland Co. CD 10/5.

### CONTRACTS AWARDED

**Ill., Carlinville**—Macoupin Co., Oct. 8, imprv. 10.260 cu. yd. road, to R. E. Jones, 1021 S. Grand East, Springfield, **Mass., $45,383.** CD 9/28—EBE 9/30.

**†Kansas**—U. S. Eng., 10 E. 17 St., Kansas City, Mo., excavation, paving, Contr. 23-028-Eng-112, Ellis Co., to H. J. Taylor, Salina, **$30,000.**

**Neb., Bellevue**—Concrete curbing, guttering and sidewalks, to Louis S. Noble Constr. Co., 1246 S. 14 St., Omaha, **$111,590.** Bids 9/30. Henningson Eng. Co., Standard Oil Bldg., Omaha, engrs.

**†New Hampshire**—U. S. Eng., 31 St. James Ave., Boston, Mass., surfacing, Contr. 19-023-Eng-34, Hillsboro Co., to Warren Bros. Roads Co., 38 Memorial Dr., Cambridge, Mass., **$50,000.**

**†North Carolina**—U. S. Eng., 308 Customhouse, Wilmington, paving, clearing, stumping, Iden. 982-44-44, Richmond Co., to E. W. Grannis, Fayetteville, under **$100,000.** Bids 9/28.

**†Ohio**—U. S. Eng., Wright Field, grading, Contr. 33-046-Eng-37, Montgomery Co., to W. L. Johnson Co. & Assoc., Hicksville, **$90,000.**

**†Oregon**—U. S. Eng., Pittock Blk., Portland, repairing, reconstructing streets, other areas, Benton Co., to Parker-Schram Co., Couch Bldg., Portland, **$36,000.** Awarded 10/11.

**Pa., Woodville**—Commonwealth of Pennsylvania, Dpt. Property & Supplies, Harrisburg, 400 ft. roadway, 12 ft. wide, and coal handling equipment at Woodville State Hospital, to C. W. Tanner, Box 138, South Hills Br. RD 9, Pittsburgh, Est. **$25,000.** Chester Engineers, 210 E. Parkway, NS, Pittsburgh, engrs.

**R. I., Newport**—P. Wks. Dpt., City Hall, granolithic sidewalks, to Callan Constr. Co., 539 Hope St., Bristol, **$31,329.**

**†Texas**—U. S. Eng., 25 St. and Avenue F, Galveston, asphalt surfacing, Sol. 41-243-44-C54, Victoria Co., to Collins & Bland, Box 1192, Austin, **$27,600.**

**West Virginia**—State Rd. Comn., Charleston, imprv. 1.037 mi. Cabell Co., to McHugh Bros., 1018 Virginia St. E., Charleston, **$49 247.** Bids 10/19. CD 10/11—ENR 10/14.

**Quebec**—Province of Quebec, c/o Ministry of Roads, Quebec City, grading, gravelling, bituminous concrete paving 1 2/3 mi. Quebec Co., to Union Quarry & Paving Co., Ltd., 48 Second St., Quebec City, **$67,500***4¼** mi. in Lachute, to H. J. O'Connell Ltd., Canada Cement Bldg., Montreal, **$170,000; widening,** straightening 1¼ mi. hy., Shefford Co., to Cormier Ltd., 175 Radison St., Three Rivers. CD 9/21.

**Quebec**—Dpt. Roads, Quebec City, 5.7 mi. gravel service road south side of Sir Wilfred Lourier Hy., Lotbiniere Co., to Napoleon Trudel et File, Irenee, **$50,000.** Bids 8/31.

**Que., Calumet Island (Pembroke)**—Dpt. Mines, Quebec City, imprv. roads to Calumet Mines to LaFlamme & LaFlamme, 8500 St. Hubert St., Montreal, **$55,000.**

**Que., Montreal**—Dpt. Natl. Defense (Army), Ottawa, Ont., surfacing outside storage area at Ordnance Depot, near here, to Provincial Constr. Co., Ltd., 2750 Hill Park Rd., **$52,000.**

## EARTHWORK, WATERWAYS

### PROPOSED WORK

★**†Arkansas and Louisiana**—U. S. Eng., 300 Bway., Little Rock, Ark., flood control project on the Boeuf and Tensas Rivers and Bayou Macon, Chico, Desha, Ashley, Jefferson and Lincoln Counties.

**†Arkansas**—U. S. Eng., 300 Bway., Little Rock, Blakeley Mountain Dam Water Control and Power proj., Garland Co.

**†Arkansas**—U. S. Eng., West Memphis, dredging channel to Helena Harbor, Phillips Co. Over $25,000.

**Ia., Muscatine**—Muscatine Levee Imprvt. Comn., R. E. Dunker, chn., rejected bids Sept. 24, levee along Mississippi River. CD 9/3—ENR 9/16.

**Louisiana**—The Texas Co., 919 St. Charles St., New Orleans, dredging channel to have depth of 7 ft. below mean low water over bottom

EARTHWORK, etc. (Proposed Work, Cont'd.) width of 65 to 135 ft. to connect with an existing channel, St. Mary Parish.

**†Oregon**—U. S. Eng., Pittock Blk., Portland, dredging Chetko Harbor. $190,000.

**†Oregon**—U. S. Eng., Pittock Blk., Portland, dredging channel and basin Umpqua River. $55,000.

★**†Washington**—U. S. Eng., 800 3 Ave., Seattle, Zone 4, shoal deepening in Port Angeles Harbor, $10,000; dredging channel and turning basin in Olympia Harbor, $68,000; dredging Wapato waterway at Tacoma, $200,000; dredging Stillaguamish River Channel, $35,000; basin and breakwater at Lake Crockett, $225,000.

**Wis., Sparta**—H. L. Beckman, city clk., widening channel Beaver Creek and constructing bridges. $100,000.

### BIDS ASKED

*Bids Asked November 1*

**New Jersey**—Bd. Commerce & Navigation, Trenton, dredging over Inland Waterway near Surf City, Barnegat Bay between Carvel and Pettit Islands, Ocean Co.

*Bids Asked November 8*

**†Washington**—Bureau of Reclamation, Denver, Colo., earthwork, pipelines, structures, Laterals 59.3 to 69.8 and Sublaterals and diversion channels Mile 38.17 to Mile 49.00, Roza Div., Yakima Project, Spec. 1062. Extended date. CD 10/4—ENR 10/7.

*Bids Asked November 10*

**†Arkansas**—U. S. Eng., U. S. Post Office & Courthouse, Vicksburg, Miss., approx. 408,000 cu. yd. earthwork on south bank Arkansas River, Sol. 22-052-44-33, Desha Co.

*Bids Asked November 12*

**Tex., Houston**—Harris Co. Navigation Dist., Courthouse, rock, steel and rein.-con. retaining wall, incl. embankment work.

### LOW BIDDERS

**California**—State Hy. Dpt., State Bldg., Los Angeles, Oct. 14, repairing flood protection work along South Clara River, Ventura Co., from Frontier Constr. Co., 2034 Orange Dr., Whittier, **$64,442.** CD 10/6.

**†South Carolina**—U. S. Eng., 33 Customhouse, Charleston, Oct. 12, dredging in Goose Creek, No. 231-44-63, from Atkinson Dredging Co., Great Bridge, Va.

### CONTRACTS AWARDED

**Calif., Los Angeles**—Los Angeles Co. Flood Control Dist., 751 S. Figueroa St., Zone 14, Oct. 19, imprv. Los Angeles River Channel, White Oak to Wilbur Aves., 132,000 cu. yd. excav., from G. G. Willis & Son, 2119 E. 25 St., **$31,360.** CD 10/6.

**†Massachusetts**—U. S. Eng., Park Sq. Bldg., Boston, dredging, No. 19-023-44-Neg 78, Suffolk Co., to Arundel Corp., 88 Commercial Wharf, Boston, **$400,000.** Bids 10/6.

**†New York**—U. S. Eng., Chimes Bldg., Syracuse, flood control facilities, Contr. 321-eng-1016, Oneida Co., to Bero Engr. & Constr. Corp., 1069 Walden Ave., Buffalo, **$40,000.**

**†Oregon**—U. S. Eng., Pittock Blk., Portland, placing stone revetment in Willamette River, Multnomah Co., to Oscar Butler & Son, 4910 N.E. 42 St., Portland, **$19,500.** Awarded 10/9. CD 10/4—ENR 10/7.

**Wash., Seattle**—Bd. P. Wks., County-City Bldg., Zone 4, 8,000 cu. yd. loose and solid rock excav. at Ross Dam from Elevation 1550 to Elevation 1650, etc., to General-Shea-Morrison, 3840 Iowa St., Seattle, Zone 6, **$64,000.** E. R. Hoffman, City Light Bldg., Zone 4, city light supt.

## UNCLASSIFIED

### PROPOSED WORK

**†California** — RAILROAD FACILITIES — U. S. Eng., 74 New Montgomery St., San Francisco, railroad facilities, Spec. 1192, San Francisco Co.

**†Connecticut** — HANGAR—Chance Vought Aircraft Div., United Aircraft Corp., 550 Main St., Stratford, completing plans experimental hangar, over $40,000. Defense Plant Corp. will finance. Albert Kahn Associated Architects & Engineers, Inc., 345 New Center Bldg. Detroit, Mich., engrs.

**Conn., New London**—RAIL SALVAGE, etc.—City Dpt. P. Wks., Municipal Bldg., removal trolley rails, rebuilding concrete road, new water and sewer pipes, Bank St. Over $25,000.

**†Fla., Jacksonville**—AIRPORT—City, bids soon, airport imprvs., incl. grading, drainage. $250,000. CAA. W. E. Sheddan, Eng. Bldg., ch. engr. CD 7/9—ENR 7/8.

**†Ia., Arco**—ELECTRIC LINES—Lost River Electric Co-op., Arco, 70 mi. electric lines. $120,000 REA.

**Ia., Centerville**—COAL CHUTE—The Chicago, Rock Island & Pacific Ry. Co., F. W. Thompson, ch. engr., LaSalle St. Station Chicago, Ill., coal chute. $25,000.

**Ia., Des Moines**—AIRPORT—A. Johnson, mayor, City Hall, airport completion, incl. grading, fencing, concrete paving, $100,000. Applied to CAA.

**Ia., Iowa City**—AIRPORT—G. D. Dohrer, city clk., airport completion, incl. runway imprvs. $50,000. Applied to CAA. CD 3/18—ENR 3/25.

★**Kan., Pittsburg** — AIRPORT COMPLETION—City, airport completion, incl. grading, subbase, base drainage, watermains, $600,000. Arranging for application to CAA. CD 3/23—ENR 3/25.

**Louisiana**—OIL PIPELINE—The Standard Oil Co. of Louisiana, Standard Oil Bldg., Shreveport, installing, maintaining 6 in. oil pipeline approx. 23 mi. southwesterly from Plaquemine, Iberville and St. Mary Parishes.

**Louisiana**—OIL WELL, etc.—Geo. E. Echols, et al., Commerce Bldg., Houston, Tex., 10,500 ft. test oil well, storage, etc., St. James Parish. Over $25,000.

**Louisiana**—OIL WELL—Union Sulphur Co., Lake Charles, drilling, developing new deep test oil well, Calcasieu Parish. $25,000.

**Louisiana** — SULPHUR WELL TIMBER PILE PLATFORMS—Duval Texas Sulphur Co., Esperson Bldg., Houston, Tex., installation, maintenance timber and timber pile platforms, cluster of piles, appurtenant structures for drilling and exploratory well for sulphur production to be designated as Duval Texas Sulphur Co. State No. 1, Calcasieu Lake, near southeastern shore, Cameron Parish.

**La., Pine Prairie**—OIL WELL—Gulf Refining Co., Gulf Bldg., Houston, Tex., drilling, developing new 9,000 ft. test oil well. Over $25,000.

**La., Quarantine Bay**—OIL WELL, etc.—Gulf Oil Co., Gulf Bldg., Houston, Tex., 11,000 ft. test oil well, storage, Plaquemines Parish. Over $25,000.

**†Missouri** — RURAL ELECTRIC LINES — Sac-Osage Electric Co-operative, El Dorado Springs, addnl. lines, connections. $25,000. REA loan granted.

**†Missouri** — RURAL ELECTRIC LINES — West Central Electric Co-operative, Higginsville, 76.8 mi. rural electric lines. $100,000. REA loan granted.

**Mo., Jefferson City**—AIRPORTS—City, c/o Mayor, airports. Over $25,000. Sites being studied for CAA development.

**Mo., Sedalia** — IMPROVEMENTS — $5,500 bond election, Nov. 2, purchasing land for imprvs., incl. lighting sys., drainage, etc. $100,000 or more.

**N. D., Valley City**—AIRPORT—L. T. Halvorson, city Aud., City Hall, airport completion. $250,000. Applied to CAA.

**O., Cleveland**—IMPROVEMENTS—S. Newman, comr. Pub. Properties, City Hall, imprvs. $100,000. J. C. Wenrick, city engr.

**O., Cleveland**—PARK IMPROVEMENTS—City, A. L. Munson, dir. Parks & Playgrounds, City Hall, park imprvs., landscaping, tree and shrub planting, walks, driveways. $300,000. S. Newman, City Hall, park engr.

**†Oklahoma and Texas**—FACILITIES—U. S. Eng., 416 Wright Bldg., Tulsa, 2, Okla., facilities, incl. grading, sanitary sewers, water lines, bldgs., etc., Sol. 34-006-44-5, Kay and Muskogee Counties, Okla., and Gray Co., Tex.

**†Oklahoma** — FUELING SYSTEM — U. S. Eng., 416 Wright Bldg., Tulsa, Zone 2, fueling sys. addns., expansion, Sol. 34-006-44-3, Gray Co. $25,000.

**†Oklahoma** — FUELING SYSTEM — U. S. Eng., 416 Wright Bldg., Tulsa, Zone 2, expanding, imprv. fueling sys., Sol. 34-006-44-3, Muskogee Co. $25,000.

**†Oklahoma**—IMPROVEMENTS—U. S. Eng., 416 Wright Bldg., Tulsa, Zone 2, imprvs., Sol. W-006-44-6, Woodward Co. Over $25,000.

★**†Pa., Scranton and Wilkes-Barre**—AIRPORT—Civil Aeronautics Admin., La Guardia Field, Jackson Heights, N. Y., airport between Scranton and Wilkes-Barre, $2,800,000 allot. available. CD 6/11/42—ENR 6/18/42.

**†South Carolina**—IMPROVEMENTS—U. S. Eng., Fort Jackson, revised plans imprvs. bldg., Lexington Co. CD 10/14—ENR 10/14, under BA.

★**†Texas** — CONSTRUCTION — U. S. Eng., 231 W. Main St., Denison, construction at Army Air Forces installation, Dallas Co. Over $5,000,000.

**†Texas**—IMPROVEMENTS—U. S. Eng., 25 St. and Avenue F, Galveston, imprvs., Sol. 41-243-44-C61, Matagorda Co.

**Texas**—OIL WELL—Ralph E. Fair, Inc., Milam Bldg., San Antonio, drilling, developing 4,000 ft. test oil well, Starr Co.

**Texas**—OIL WELL—Foha Oil Co., M. Esperson Bldg., Houston, drilling, casing, developing oil well, earthen storage, etc., in Flag Lake area, Henderson Co. Over $25,000.

**Texas**—OIL WELL—Humble Oil & Refining Co., Humble Bldg., Houston, drilling, developing 10 new oil wells, King Ranch area, Willacy Co.

**Texas**—OIL WELLS—LaGloria Corp., Corpus Christi, drilling, casing, developing several deep test oil wells, earthern storage, fuel lines, etc., Hidalgo Co.

**Texas**—OIL WELL—P. G. Lake, Inc., et al., Quitman, drilling, casing, developing oil well, Manziel field, Wood Co.

**Texas** — OIL WELL — Magnolia Petroleum Co., Petroleum Bldg., Dallas, drilling, developing new 6,500 oil well, ground storage. Over $25,000.

**Texas**—OIL WELL—[illegible] G. Schaefer, Yoakum, drilling, developing oil well, [illegible]som Pool area, Yoakum Co.

**Tex., A'pine (east)**—OIL WELL—Shan[illegible] Oil & Gas Corp., Alpine, drilling, casing, [illegible]veloping oil well tests, 6,000 and 9,[illegible] $75,000.

**Tex., Anson**—OIL WELL—Maracaibo [illegible] Exploration Co., Continental Bldg., [illegible] drilling, easing, developing oil well, earth[illegible] storage. Over $25,000.

**Tex., Athens**—OIL WELL—Continental [illegible] Co., P. N. Wiggins, Jr., C. E. Hyde, [illegible] Gas Bldg., Houston, drilling, casing, deve[illegible] ing 9,000 ft. test oil well, earthen st[illegible] Over $25,000.

**Tex., Bellevue**—OIL WELL—J. A. Hu[illegible] rey, 1st Natl. Bank Bldg., drilling, deve[illegible] ing 6,200 ft. oil well. $40,000.

**Tex., Bledsoe**—OIL WELL—E. Constan[illegible] Jr., et al, 6107 St. Andrews Dr., Dallas, [illegible] ing, developing 5,000 ft. test oil well.

**Tex., Brazoria**—OIL WELL—Rowan D[illegible] ing Co., Commerce Bldg., Houston, dri[illegible] developing deep test well, storage, etc.

**Tex., Buna**—OIL WELL—Sun Oil [illegible] Esperson Bldg., Houston, drilling, develo[illegible] 6,000 ft. oil test well, storage, etc.

**Tex., Canton**—OIL WELL—S. Bronstei[illegible] al, developing new 6,000 ft. test oil well.

**Tex., Carthage**—OIL WELL—Rogers L[illegible] Longview, drilling, casing, developing 5,3[illegible] oil well.

**Tex., Chalk Hill (Mail Elderville)** — [illegible] WELL—Phillips Petroleum Co., M. Espe[illegible] Bldg., Houston, drilling, developing oil w[illegible]

**Tex., Clarkwood** — OIL WELL — Hen[illegible] Bros., Corpus Christi, drilling, develo[illegible] 7,000 ft. test oil well, earthern storage, [illegible] $25,000.

**Tex., Coahoma**—OIL WELL—Bond Oil [illegible] Big Spring, drilling, developing 4,200 ft. [illegible] well.

**Tex., Edna**—OIL WELL, etc.—Seawell [illegible] Co., Corpus Christi, drilling, developing [illegible] deep test oil well, ground storage, etc., [illegible] here. $25,000.

**Tex., Fentress**—OIL WELL—Churchill [illegible] Co., Caldwell, drilling, developing 2,200 [illegible] oil well.

**Tex., Freer**—OIL WELL—G. W. Lyles, et [illegible] Milam Bldg., San Antonio, drilling, casi[illegible] developing 2,500 ft. test oil well.

**Tex., Ft. McKavett**—OIL WELL—Phill[illegible] Petroleum Co., Esperson Bldg., Hous[illegible] drilling, developing 6,500 ft. oil well, earth[illegible] storage, etc.

**Tex., Gregory** — OIL WELL — Butcher-[illegible] thur, Inc., et al., Corpus Christie, drill[illegible] casing, developing 10,000 ft. oil well, earth[illegible] storage. $50,000.

**Tex., Hawkins (P. O. Yantis)**—OIL PIP[illegible] LINE—Humble Oil & Refining Co., Hum[illegible] Bldg., Houston, and Natural Gasoline Co[illegible] P. O. Box 1689, Tulsa, Okla., 100 mi. 3-[illegible] 24-in. gathering crude oil pipeline. $[illegible]

**Tex., Iowa Colony**—OIL WELL—Salt Do[illegible] Oil Co., Esperson Bldg., Houston, drill[illegible] developing new deep test oil well. C[illegible] $25,000.

**Tex., Iraan**—OIL WELL—J. I. & P. [illegible] Moore, Midland, drilling, developing 12[illegible] ft. cable tool oil well.

**Tex., Jacksboro**—OIL WELL—L. A. Hed[illegible] & Associates, Continental Bldg., Dall[illegible] drilling, casing, developing 3 oil wells, earth[illegible] storage, fuel line, etc. $90,000.

**Tex., Jourdanton**—OIL WELL—Humble [illegible] Co., Humble Bldg., Houston, drilling 7,000 [illegible] test oil well. Over $25,000.

**Tex., Lavernia**—OIL WELL—W. B. Phip[illegible] et al, Milam Bldg., San Antonio, drill[illegible] developing 3,500 ft. test oil well.

**Tex., LaWard**—OIL WELLS—Humble Oil [illegible] Refining Co., Humble Bldg., Houston, drill[illegible] developing 2 deep test oil wells. Over $25,0[illegible]

**†Tex., Mason**—AIRPORT LANDING FIE[illegible] —Civil Aeronautics Admin., 1309 Elec[illegible] Bldg., Fort Worth, auxiliary landing fi[illegible] Over $25,000.

**Tex., Merkel**—OIL WELL—Lewis Produ[illegible] tion Co., Milam Bldg., San Antonio, drill[illegible] developing test well, $25,000.

**Tex., Mineral Wells**—OIL WELL—A. [illegible] Rife, et al, Mineral Wells, drilling, casing, [illegible] veloping 10,000 ft. oil well, storage pits, fu[illegible] line, etc. Over $25,000.

**Tex., Montague**—OIL WELL—S. D. Dun[illegible] Montague, drilling, developing 5,600 ft. [illegible] oil well. $25,000.

**Tex., Novice** — OIL WELL — Hunter [illegible] Hunter, Wichita Falls, drilling, develop[illegible] 3,800 ft. oil well. $25,000.

**Tex., Oakwood**—OIL WELL—Carter Gra[illegible] Co., Trinity Bldg., Fort Worth, drilling, [illegible] veloping 7,000 ft. test oil well. Over $25,0[illegible]

**Tex., Overton**—SALT WATER INJECTI[illegible] WELL—East Texas Salt Water Disposal Co[illegible] Kilgore and Tyler, drilling, developing [illegible] 3,000 ft. salt water injection well, 1 [illegible] southwest of here. $60,000.

**Tex., Paducah**—OIL WELL—The Ohio [illegible] Co., Oil & Gas Bldg., Houston, drilling, [illegible] veloping 1 or more oil wells, storage, [illegible] Over $25,000.

**Tex., Palestine**—OIL WELL—V. J. Mey[illegible] Esperson Bldg., Houston, drilling, casing, [illegible] veloping 6,000 ft. oil well.

ASSIFIED. (Proposed Work, Cont'd.)

Pecos—OIL WELL—Humble Oil & Co., Humble Bldg., Houston, drilling, developing, 5,000 ft. test oil well, storage, fuel line, etc. Over $25,000.

Pettus—OIL WELL—Morris & Allen, Campbell, et al., Alamo National Bldg., Antonio, drilling, casing, developing ft. oil well. Over $25,000.

Pharr—OIL WELL—Showers & Mon- Brownsville, drilling, developing deep well.

Fremont—OIL WELL, etc.—Sun Oil Esperson Bldg., Houston, drilling, devel- 4,500 ft. test oil well, earthern storage, $40,000 or more.

Fremont—OIL WELL—S. E. Wilson, 503 Caroline St., Houston, drilling, ping deep test oil well.

Realitos—OIL WELL—Standard Oil Texas, Petroleum Bldg., Houston, drill- sing, developing 6,000 ft. test oil well.

Rio Grande—OIL WELL—Sun Oil Co., on Bldg., Houston, drilling, casing, de- g 4 deep test oil wells, earthen stor- tc. Over $25,000.

Rockland—OIL WELL—Humble Oil ining Co., Humble Bldg., Houston, 3,500 t oil well, $40,000.

St. Jo—OIL WELL—S. D. Daube, et owie, drilling, casing, developing 5,000 well.

Segno—OIL WELL—Gulf Oil Co., Bldg., Houston, drilling 9,000 ft. test storage units, fuel line. $25,000 or more.

Stamford—OIL WELL—J. C. Hunter & bilene, drilling, developing oil well.

Stanton—OIL WELL—Champlin Re- Co., Magnolia Bldg., Dallas, drilling, ing new deep test oil well. $25,000.

Sulphur Springs—OIL WELL—J. C. m, et al., Sulphur Springs, drilling, developing 9,000 ft. oil well, earthen tc. Over $25,000.

Weir—OIL WELLS—F. Fuchs, et al, town, drilling, casing, developing 3 ,000 ft. test oil wells. $25,000.

Winnsboro—OIL WELL, etc.—Dancie- l & Refining Co., W. T. Wagoner Bldg., Worth, drilling, casing, developing 6,800 well, earthen storage.

Wright City—SALT WATER DIS- WELL—East Texas Salt Water Dis- Co., Kilgore and Tyler, drilling, develop- w 4,000 ft. salt water disposal well, southwest of here. $75,000.

**ASKED**

*Bids Asked November 1*

Halifax—WHARF REPAIRS—Secy. Munitions & Supply, Ottawa, Ont., re- Kings and Engineers Wharves, for National Defense (Sea), Ottawa, Ont. $100,000.

*Bids Asked November 2*

Jacksville—AIRPORT—Civil Aero- Admin., 608 S. Dearborn St., Chicago, irport, for Rock Co. Extended date. 19—ENR 10/21.

*Bids Asked November 5*

Longview—AIRPORT—Civil Aero- Admin., P.O. Box 1689, Fort Worth, imprvs., clearing, grubbing, drainage xcav., fencing, seeding, paving, etc., 444-654. Plans deposit $20. Bid date CD 10/25—ENR 10/14.

*Bids Asked*

achusetts—CHIMNEY—U. S. Eng., 31 es Ave., Boston, (selected list bidders). chimney, No. 19-023-44-NEG 98. Mid- Co. $7,060.

homa—IMPROVEMENTS—U. S. Eng., right Bldg., Tulsa, Zone 2, imprvs., bldgs., facilities, Sol. 34-066-44-4, ma Co. $25,000.

Innerkip—PIER—Canadian Pacific Ry. Munford. Windsor Station. Montreal, rein.-con. pier. CD 5/12—ENR5/27.

**BIDDERS**

siana—DRILL FIELDS—U. S. Eng., and Avenue F, Galveston, Tex., Oct. 20, drill fields, incl. clearing, grubbing, flexible base, Solic. 41-243-44-C59, Parish, from Boh Brothers Const. 00 Cypress St., New Orleans, under . CD 10/20.

a—IMPROVEMENTS—U. S. Eng., 25 d Avenue F, Galveston, imprvs., Sol. 44-C57, Cameron Co., from Dodds & artner, Inc., 382 North Bowie St., San approx. $100,000. CD 10/15—ENR 10/21.

**RACTS AWARDED**

rnia—PIER APRON — State Harbor San Francisco Harbor, Ferry Bldg., ancisco, apron on north side of Pier 48 Francisco Embarcadero, to Mars Metal and Minnesota Sts., San Francisco, Bids 10/14. CD 10/6.

fornia—STORAGE YARDS, etc.—Doug- craft Co., Santa Monica, storage yards, areas, street work and drainage, to Concrete Pipe Corp., P. O. Box 1, Sta. Angeles, approx. $200,000. Federally

d., Oakland—OPEN STORAGE AREA & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., open storage area completion, N.S.D., NOY 7639, to Miller & Stoutenberg, Central Bank Bldg., $112,920.

†Florida—IMPROVEMENTS—U. S. Eng., 575 Riverside Ave., Jacksonville, Zone 2, imprvs. appurtenant structures, roads, Neg- Jax-44-253, Clay Co., to B. B. McCormick & Sons, Graham Bldg., Jacksonville, Zone 1, approx. $400,000. Awarded 10/16.

†Fla., Dinner Key—CONTROL TOWER, HANGAR, etc.—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., control tower, hangar, etc., N. A. F., NOY 6530, to Hillyer & Lovan, 111 W. Ashley St., Jacksonville, $355,960.

†Illinois—APRONS, etc.—U. S. Eng., 520 Merchandise Mart, Chicago, addnl. aprons, taxiway, Contr. 11-032-Eng-103, Champaign Co., to Thomas McQueen Co., Forest Park, $400,000.

†Ind., Crane (Mail Stockwell) — RAILROAD, etc.—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., railroad, ties, rails, etc., NAD, NOY 7596, to Maxon Constr. Co., 131 N. Ludlow Pl., Dayton, O., $205,995.

†Kansas—GRADING, etc.—U. S. Eng., 10 E. 17 St., Kansas City, Mo., grading, gasoline sys., paving, track laying, etc., Contr. 23-028-Eng-109, Barton Co., to Aqua Systems, Inc., 385 Gerard Ave., New York, N. Y., $30,000.

†Kansas—IMPROVEMENTS—U. S. Eng., 10 E. 17 St., Kansas City, Mo., imprvs., Cowley Co., to Peter Kiewit Sons Co., Omaha Natl. Bank Bldg., Omaha, Neb. Est. $75,000. CD 8/25—ENR 9/2.

†Kansas—IMPROVEMENTS—U. S. Eng., 10 E. 17 St., Kansas City, Mo., imprvs., railroad spur Ellis Co., to McGinnis & Grafe, 503 Continental Bldg., Dallas, Tex., under $100,000.

†Massachusetts—CONSTRUCTION — U. S. Eng., 31 St. James St., Boston, addnl. construction, Contr. 19-023-eng-111, Barnstable Co., to M. Slotnick Co., 333 Washington St., Boston, $80,000.

†Massachusetts—SPRINKLER SYSTEM — U. S. Eng., 31 St. James Ave., Boston, installing sprinkler sys., Contr. 19-023-eng-107, Middlesex Co., to H. G. Vogel Co., 141 Milk St., Boston, $40,000.

†Massachusetts—TEST TRACK—U. S. Eng., 31 James Ave., Boston, test track, appurtenant work, Contr. 19-023-Eng-99, Suffolk Co., to Berke Moore Co., Inc., 11 Boylston St., Brookline, $70,000.

Mass., Springfield — RAIL SALVAGING — Dpt. Streets & Eng., Administration Bldg., removing street railway tracks, 9,285 lin. ft. various streets, to Mariani Constr. Co., 222 Forbes Ave., New Haven, Conn., 54c. per ft.; repaving and repairing damaged pavement, by City, own forces. Est. over $25,000. Bids 10/8 CD 10/5.

†Mississippi—IMPROVEMENTS—U. S. Eng., Grant St., west of Westwood St., Mobile, Ala., imprvs., Grenada Co., to S. R. Batson Constr. Co., 2301 Hollywood Blvd., Birmingham, Ala., $30,000.

†Nebraska—IMPROVEMENTS—U. S. Eng., 1709 Jackson St., Omaha, imprvs., Hall Co., to Peter Kiewit Sons Co., Omaha Natl. Bank Bldg., Omaha. Est. under $50,000.

†Nebraska—IMPROVEMENTS—U. S. Eng., 1709 Jackson St., Omaha, imprvs., Lancaster Co., to Abel Constr. Co., 900 N. 16 St., Lincoln. Est. under $50,000.

†Nebraska—IMPROVEMENTS—U. S. Eng., 1709 Jackson St., Omaha, imprvs., Red Willow Co., to Roush Const. Co., McCook. Est. under $50,000.

†Nebraska—IMPROVEMENTS—U. S. Eng., 1709 Jackson St., Omaha, imprvs., grading, drainage, fence, Thayer Co., to Napier Associates, Geneva. Est. under $50,000.

†Nev., Fallon—PARKING AREA AND GRADING—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., parking area and grading, NAAS, NOY 7762, to Johnson, Drake & Piper, Latham Square Bldg., Oakland, Calif., $240,000.

†New Jersey—RUNWAY—U. S. Eng., 6 and Walnut Sts., Phila., Pa., reconstructing runway, Contr. 36-109-Eng-161, Cumberland Co., to Union Paving Co., Broad and Stiles Sts., Phila., Pa., $200,000.

N. J., Elizabeth—SWIMMING POOL—City, City Hall, repairing Dowd Swimming Pool, to D. McCarron, 550 Pine St., $25,000. Bids 9/20. CD 9/14—ENR 9/16.

†New York—SPRINKLER SYSTEM—U. S. Eng., Chimes Bldg., Syracuse, installing sprinkler sys., Contr. 321-eng-1018, Erie Co. to Moffett & Troop, Inc., 4 Smithfield St., Pittsburgh, Pa., $30,000.

†New York—TAXIWAY, etc.—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., taxiway and warm-up apron paving, NAS, Floyd Bennet Field, NOY 7444, to Gould & Kress, Inc., 3366 Bedford Ave., Brooklyn, $25,633.

†New York—TRAINING AIDS—U. S. Eng., 120 Wall St., Zone 5, training aids, Contr. 30-075-Eng-202, Rockland Co., to Marcello Mezzullo, Inc., 132 Pearl St., Port Chester, $40,000. Bids 10/2.

†North Carolina—FACILITIES—U. S. Eng., 308 Customhouse, Wilmington, addnl. facilities, Richmond Co., Contr. 31-075-Eng-54, Richmond Co., to P. S. West Constr. Co., Inc., Statesville, $40,000.

†North Carolina—IMPROVEMENTS—U. S. Eng., 308 Customhouse, Wilmington, imprvs. in bldg. area, No. 31-075-44-48, Cumberland Co., to F. D. Cline, Fairview Rd., Raleigh, under $100,000. Bids 10/18.

Ohio and West Virginia—TUNNEL TEST HOLE BORING—Hanna Coal Co., J. C. Robb, secy., R. V. Clay, engr.-in-charge, Leader Bldg., Cleveland, O., test hole borings for tunnel underneath Ohio River from Dilles, O., to Moundsville, W. Va. to supply fuel oil to Ohio Pub. Serv. Co., to Sprague & Henwood Co., Magee Bldg., Pittsburgh, Pa.

†South Carolina—IMPROVEMENTS—U. S. Eng., 33 Customhouse, Charleston, imprvs., drainage, to Hubbard Constr. Co., Marion, and Davis Moragne Constr. Co., 301 Gadsden St., Columbia, under $200,000. Bids 10/14.

†South Carolina—IMPROVEMENTS—U. S. Eng., 33 Customhouse, Charleston, imprvs., bldg., No. 231-44-65 Neg., to J. Moore, Myrtle Beach, under $50,000. Bids 10/18.

†South Carolina—IMPROVEMENTS—U. S. Eng., 33 Customhouse, Charleston, imprvs., bldg., No. 231-44-66-Neg. Florence Co. to Jeff Moore, Myrtle Beach, under $50,000. Bids 10/18.

†South Carolina—IMPROVEMENTS—U. S. Eng., 33 Customhouse, Charleston, imprvs., bldg., 231-44-67-Neg., Lexington Co., to M. B. Kahn Constr. Co., 714 Lady St., Columbia, under $50,000. Bids 10/18.

†Texas—CONSTRUCTION—U. S. Eng., Fort Sam Houston, addnl. construction, Howard Co., to Templeton & Cannon, 25 W. Beauregard St., San Angelo, $30,000.

†Texas—ELECTRICAL WORK, etc.—U. S. Eng., 231 W. Main St., Denison, electrical work, Contr. 41-242-Eng-22, to Fischback and Moore, Southland Life Bldg., Dallas, $100,000; plumbing, heating, air conditioning and fire protection, Contr. 41-242-Eng-21, to C. Wallace Plumbing Co., 2224 Summer St., Dallas, $200,000, both Tarrant Co.

†Texas—FACILITIES—U. S. Eng., Fort Sam Houston, addnl. facilities, Maverick Co., to H. B. Zachry, P. O. Box 596, San Antonio, $32,000.

Texas—GAS PIPELINE—West Texas Utilities Co., San Angelo, 21 mi. 6 in. gas pipeline carrier, between point in Pecos Co. to power plant near Girvin, Purchase and Hire. $66,000. CD 10/15—ENR 10/21.

Texas—OIL WELL—Argo Oil Corp., Fort Worth National Bank Bldg., Fort Worth, drilling, developing new 4,500 ft. test oil well, ground storage, etc., adjacent to Tarrancahaus Field, Duval Co., to Newman Bros. Drilling Co., Milam Bldg., San Antonio, approx. $30,000.

Tex., Andrews — OIL WELLS — Texas Co., 2521 Pine St., Fort Worth, drilling, developing 2 new deep test oil wells, to J. E. Mabee, Midland, 1 over $25,000, other $38,000. CD 9/9—ENR 9/16.

★†Tex., El Paso—AIRPORT—Civil Aeronautics Admin., P. O. Box 1689, Fort Worth, airport imprvs., to Texas Bitulithic Co., P. O. Box 5297, Dallas, $717,205. Bids 9/30, awarded 10/21. CD 10/5—ENR 10/7, under LB.

Tex., Lavernia—OIL WELL—H. A. Rice, 127 Jno. Page Dr., San Antonio, drilling, casing, developing new 3,500 ft. test oil well, to Pegg Bros. Drilling Co., 934 Chicago Bldg., San Antonio, about $25,000.

Tex., Henderson—OIL WELL—Frank Soape, et al, drilling, developing new deep test oil well, earthen pits, fuel line, etc., to N. H. Wheeless Drilling Co., Esperson Bldg., Houston, approx. $25,000.

★†Virginia—FACILITIES—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., addnl. facilities, Camp Bradford, NOY 7338, to A. Farnell Blair, Decatur, Ga., $738,155. CD 9/24.

★British Columbia—GRADING, etc.—Dpt. National Defense for Air, Ottawa, Ont., grading, hard-surface construction, drainage, at S.F.T. School, to Bennett & White Const. Co. Ltd., 510 W. Hastings St., Vancouver, $604,000.

★British Columbia — IMPROVEMENTS — Dpt. Transport, Ottawa, Ont., addnl. imprvs., clearing, stumping, grubbing, stripping, grading, drainage, etc., to General Constr. Co., Ltd., Granville Island, Vancouver, about $900,000.

★British Columbia — IMPROVEMENTS — Dept. Natl. Defense for Air, Ottawa, Ont., imprvs., addnl. accommodation, incl. bldgs., etc., RCAF Station, to Marwell Const. Co. Ltd., 540 Howe St., Vancouver, $822,000.

British Columbia—STEAM HEATING SYSTEM—Dpt. Munitions & Supply, Ottawa, Ont., steam heating sys., for R.C.A.F. Station, to C. J. McDowell, 1000 Douglas St., Victoria, $38,000.

B. C., Smithers — IMPROVEMENTS — Dpt. Transport, Ottawa, Ont., imprvs., grading, rolling, dragging, drainage, etc., to Carter-Halls-Aldinger Co. Ltd., Royal Bank Bldg., Winnipeg, Man., about $148,000.

B. C., Vanderhoof—RADIO BLDGS.—Dpt. Transport, Ottawa, Ont., radio bldgs. for radio range station, and related works, to Bennett & White Constr. Co. Ltd., 510 W. Hastings St., Vancouver, about $155,000.

Man., Rivers — IMPROVEMENTS — Dpt. Transport, Ottawa, Ont., addnl imprvs., incl. grading, smoothing, rolling, hardsurfacing, to Claydon Co. Ltd., 253 St. Annes Rd., Winnipeg, about $38,000. Bids 9/13. CD 9/1—ENR 9/9.

UNCLASSIFIED, etc. (Contracts Awarded, Cont'd.)

**Man., The Pas** — IMPROVEMENTS — Dpt. Transport, Ottawa, Ont., imprvs., water supply, to Tomlinson Constr. Co. Ltd., 21 King St. E., Toronto, Ont. Est. $65,000.

**Man., Winnipeg** — HANGAR, etc. — Trans-Canada Airlines, 1465 Peel St., Montreal, Que., superstructure only, double hangar, and annex and service bldg. at R.C.A.F. Station, to Bird Const. Co., Ltd., 708 Confederation Life Bldg., $350,000. CD 9/14.

**N. B., Moncton**—IMPROVEMENTS—Trans Canada Air Lines, 255 McGill St., Montreal, Que., and Dpt. Transport, Ottawa, Ont., imprvs., bldg. exten., to Richard and B. A. Ryan, Ltd., 1808 William St., Montreal, Que., approx. $200,000. CD 8/18—ENR 9/2.

**N. B., Moncton** — IMPROVEMENTS — Dpt. Transport, Ottawa, Ont., imprvs., grading, drainage, hardsurface, etc. to Dexter Constr. Co. Ltd., Fairville (Saint John), about $58,000.

**N. S., Sydney** — IMPROVEMENTS — Dpt. Transport, Ottawa, Ont., addnl. imprvs., clearing, grubbing, grading, drainage, concrete slab, etc., to Municipal Spraying & Contracting Ltd., 1350 Barrington St., Halifax, about $95,000. CD 8/31—ENR 9/2.

**Ont., St. Eugene**—IMPROVEMENTS—Dpt. Transport, Ottawa, Ont., imprvs., incl. drainage, surface treating hard-surfaced areas, to Bertrand & Freres, L'Original, about $32,000.

**Que., Cap de la Madeleine**—IMPROVEMENTS — Dpt. Transport, Ottawa, Ont., imprvs., incl. removing stumps, grading, drainage, to Page Equipment Constr. Co. Ltd., 1497 Craig St., Three Rivers, $54,951.

**Que., Montreal** — STATION PLATFORM — Canadian National Railway, H. A. Dixon, ch. engr., 360 McGill St., Montreal, rein.-con. station platform, to A. Janin Bldg. Co. Ltd., 1460 W. Sherbrooke St., $32,000.

**Sask., Buttress** — IMPROVEMENTS — Dpt. Transport, Ottawa, Ont., imprvs., addnl. development R1 to Moose Jaw to Bird Constr. Co. Ltd., Regina, about $65,000.

## LATIN AMERICA

**Mexico**—City of Colotlipa, Municipal Hall, Colotlipa, State of Guerrero, plans hydro-electric plant, to be used as feeder to Acapulco and near cities. $500,000.

**Mexico**—City of Culiacan, Municipal Hall, Culiacan, Sinaloa, plans canal in northern part of city for irrigation purposes. $100,000.

**Mexico**—City of Monterrey, Municipal Hall, Monterrey, state of Nuevo Leon, will construct 6-pillared cement bridge on Reynose-Monterrey Hy., Monterrey, state of Nuevo Leon, by own forces. $180,000. Pablo Dominguez, Municipal Hall, Monterrey, road dir.

**Mexico**—City of Morelia, Municipal Hall, Morelia, Michoacan state, awarded contract constructing new water sys. for city, to Alfonso Villa Acosta, Morelia, Michoacan, $200,000. Awarded 10/19.

**Mexico**—City of Saltillo, Municipal Hall, Saltillo, Coahuila, plans waterworks and drainage sys. $1,000,000. Federal Health, state of Coahuila and city of Saltillo funds will be used.

**Mexico**—Mexican Federal Government (Social Security Institute), Government Palace, Mexico City, plans construction 5 workers hospitals in the country. $4,800,000.

**Mexico**—National Rys. of Mexico, (Ferrocarriles Nacionales de Mexico), L. Reina, ch. eng. M. W., 19 Bolivar St., Mexico City, plans improving 3 railroad stations in cities of **Noncalco**, (federal dist.), **Monterrey** (Nuevo Leon). Work in cooperation with North American Railway Mission.

**Mexico**—State of Coahuila, Government Palace, Torreon, Coahuila, plans pumping wells, warehouses, improved drainage, water etc. $200,000. Cost to be borne by State of Coahuila and Federal Health Board.

**Mexico**—State of Nuevo Leon, Bonifacio Salinas Leal, gov., Monterrey, Nuevo Leon, will construct El Paraguay bridge on Reynosa-Tamaulipas Hy., City and State forces. $180,000.

**Mexico**—State of Nuevo Leon, Bonifacio Salinas Leal, gov., Monterrey, Nuevo Leon, awarded contract constructing 2 story, cement state penitentiary, with towers, to Antonino Sava, Monterrey $893,000.

**Panama**—Ministry Pub. Wks., Panama City, will soon start surveys for hy. between Chiriqui Province and Bocas del Toro. CD 12/10—ENR 12/17.

**Peru**—Ministry of Pub. Wks. of Peru, Lima, will survey and prepare estimates for water, sewage and street paving works in city of **Cerro de Pasco, Department of Junin;** also plans reclaiming 4,000 hectares (1,619 acres) of land in **Province of Lucanas, Department of Arequipa,** and to improve water supply from Pisco River in **Department of Ico,** $156,046.

## PUBLIC BUILDINGS

### PROPOSED WORK

†**Alabama**—Pub. Housing Auth., NHA, Georgia Savings Bank Bldg., Peachtree and Broad Sts., Atlanta, Ga., plans by H. J. Frahn, Sheffield, family dwelling units, Ala. 1219. CD 10/6—ENR 10/14.

†**California**—Aerojet Eng. Corp., Pasadena, addnl. plant facilities. $80,000. Defense Plant Corp. will finance.

†**California**—City of Richmond Housing Auth., Atchison Village, Richmond, plans by Miller & Warnecke, 1700 Financial Center Bldg., Richmond, altering and addnl. work to dormitory bldg., Calif. 4173.

†**California**—Pub. Housing Auth., NHA, 785 Market St., San Francisco, plans by Marsh, Smith & Powell, 516 Architects Bldg., Los Angeles, 300 temporary dwelling units. Over $150,000.

†**California**—U. S. Eng., 74 New Montgomery St., San Francisco, housing, Spec. 1169, Northern California.

†**California**—U. S. Eng., 1209 8 St., Sacramento, bldgs., Spec. 711, Sacramento Co. $50,000.

†**California**—U. S. Merchant Marine Cadet Basic School, Coyote Point, plans by Gardner A. Dailey & Associates, 210 Post St., San Francisco, gymnasium bldg.

†**Calif., Alameda**—Home Owners' Loan Corp., 1440 Bway., Oakland, Zone 12, plans by Reynolds & Chamberlain, 564 Market St., San Francisco, converting bldg. at 2122 Buena Vista Ave. into living units, Case No. W4D-128. Over $5,000.

†**Calif., Alameda**—Home Owners' Loan Corp., 1440 Bway., Oakland, Zone 12, plans by J. H. Meigs, 547 Simon St., Hayward, converting residence at 1548 9 St., into 2 addnl. living units, Case W4D-141. $5,000.

†**Calif., Alameda**—Home Owners' Loan Corp., 1440 Bway., Oakland, Zone 12, plans by W. H. Hubbert, 580 Market St., San Francisco, converting residence at 1548 9 St., into a addnl. living units. Case W4D-141. $5,000.

†**Calif., Alameda**—Home Owners' Loan Corp., 1440 Bway., Oakland, Zone 12, plans by Ed. T. Foulkes, 357 12 St., Oakland, converting 2 story residence at 2310 Pacific Ave., into 4 living units. Case No. W4D-3. $8,000.

†**Calif., Alameda**—Home Owners' Loan Corp., 1440 Bway., Oakland, Zone 12, plans by M. J. Marquis, 675 37 St., Oakland, converting bldg. at 1201 Pacific Ave., into living units, Case No. W4D-101. Over $5,000.

†**Calif., Alameda**—Home Owners' Loan Corp., 1440 Bway., Oakland, Zone 12, plans by D. E. Jaekle & W. S. Gibson, Associate, Hearst Bldg., San Francisco, converting residence at 2167 Santa Clara Ave., into 6 living units, Case No. W4D-140. $12,000.

†**Calif., Berkeley**—Home Owners' Loan Corp., 1440 Bway., Oakland, Zone 12, plans by Reynolds & Chamberlain, 564 Market St., San Francisco, converting bldg. at 2737 Vennevue Ave. into living units, Case No. W4B-1122. Over $5,000.

†**Calif., Berkeley**—Home Owners' Loan Corp., 1440 Bway., Oakland, Zone 12, plans by G. E. Ellinger, 1801 Casterline Rd., Oakland, converting residence at 2530 Dwight Way into living units, Case No. W4B-517. Over $5,000.

†**Calif., Berkeley**—Home Owners' Loan Corp., 1440 Bway., Oakland, Zone 12, plans by I. M. Johnson, 44 Moss Ave., Oakland, converting residence at 2222 Durant into 6 living units, Case No. W4B-1188. $12,000.

†**Calif., Berkeley**—Home Owners' Loan Corp., 1440 Bway., Oakland, Zone 12, plans by Reynolds & Chamberlain, 564 Market St., San Francisco, converting bldg. at 2636 Etna St., into 4 living units, Case No. W4B-1058. $8,000.

†**Calif., Meadow Park**—Federal Works Agency, 2223 Fulton St., Berkeley, 5 classroom school bldg., for San Jose School Dist. of Marin Co., Calif. 4-554. $43,700.

†**Calif., Oakland**—Home Owners' Loan Corp., 1440 Bway., Zone 12, plans by Chas. E. Perry & L. H. Huriburt, 821 Market St., San Francisco, converting bldg. at 443 Lee St. into living units, Case No. W4B-1050. Over $5,000.

†**Calif., Oakland**—Home Owners' Loan Corp., 1440 Bway., Zone 12, plans by Reynolds & Chamberlain, 564 Market St., San Francisco, converting bldg. at 124 14 St. into living units, Case No. W4B-1015. Over $5,000.

†**Calif., Oakland**—Home Owners' Loan Corp., 1440 Bway., Zone 12, plans by F. L. Langhorst, 402 Jackson St., San Francisco, converting bldg. at 688 MacArthur Blvd. into living units. Case No. W4B-1203. Over $5,000.

†**Calif., Oakland**—Home Owners' Loan Corp., 1440 Bway., Zone 12, plans by Reynolds & Chamberlain, 564 Market St., San Francisco, converting residence at 336 Warwick Ave., into 4 living units. Case No. W4B-1113. $8,000.

†**Calif., Oakland**—Home Owners' Loan Corp., 1440 Bway., Zone 12, plans by C. A. Whitehead, 5365 Bway., converting bldg. at 3010 E. 17 St., into living units, Case No. W4B-1165. Over $5,000.

†**Calif., Oakland**—Home Owners' Loan Corp., 1440 Bway., Zone 12, plans by M. J. Marquis, 675 37 St., converting bldg. at 5632 Telegraph Ave., into living units, Case No. W4B-1106. Over $5,000.

†**Calif., Oakland**—Home Owners' Loan Corp., 1440 Bway., Zone 12, plans by Reynolds & Chamberlain, 564 Market St., San Francisco, converting bldg. at 1502 34 St., into 4 living units, Case No. W4B1167. $8,000.

†**Calif., Oakland**—Home Owners' Loan Corp., 1440 Bway., Zone 12, plans by D. E. Jaekle & W. S. Gibson, Associate, Hearst Bldg., San Francisco, converting residence at 1739 12 St., into 8 living units. Case No. W4B $12,000.

★†**Calif., Oakland**—Permanente Foundation Hospital, McArthur and Bway., plans by B. M. and D. B. Clark, 310 University Palo Alto, 1 and 2 story, rein.-con. addn. $750,000. FWA. CD 9/24—ENR

†**Calif., Oxnard**—Pub. Housing Auth., 785 Market St., San Francisco, $4 private trailers, Calif. 4776; and 400 dwelling units, Calif. 4777.

†**Calif., Pomona**—Home Owners' Loan Pacific Bldg., San Francisco, 20 family conversion program.

†**Calif., Richmond**—Federal Works Agency, 2223 Fulton St., Berkeley, recreational ties, community center at Eastshore Proj. Calif. 4-546. $170,000.

†**Calif., San Diego**—Pub. Housing NHA, 785 Market St., San Francisco, family dwelling units, Calif. 4782.

†**Calif., San Jose**—Home Owners' Corp., 821 Market St., San Francisco, by D. E. Jaekle & W. S. Gibson, Hearst Bldg., San Francisco, converting bldg. at corner E. Santa Clara and N. into living units, Case No. W4E-3. $

†**Calif., Stockton**—Home Owners' Corp., 1440 Bway., Oakland, Zone 12, V. Buckley, 155 Sansome St., San Fra converting residence at 1112 N. C St. into 3 living units, Case No. W $6,000.

†**Calif., Stockton**—Home Owners' Corp., 1400 Bway., Oakland, Zone 12, by P. Sala, 2130 N. Commerce St., con bldg. at 1605 S. American St., into units, Case No. W4G-114. Over $5,000.

†**Connecticut**—Pub. Housing Auth., N School St., Boston, Mass., plans by W ins, 648 Asylum St., Hartford, and cafeteria bldg., housing Conn. 6131.

†**Conn., Bridgeport**—G. Wellington, Bd. Fire Comrs., plans by A. H. Pe Salem St., 2 story, brick fire station Ave. and Old Town Rd. $45,000, FW 10/14—ENR 10/21.

†**Conn., Bridgeport**—City, G. Well pres. Bd. Fire Comrs., plans by T. Ve Main St., Bridgeport. 2 story, brick fi Broadbridge Ave. and Huntington Tu $40,000. FWA. J. A. Welman, 3018 Ma engr.

†**Fla., Ft. Walton**—Federal Works A 20 Fifth St. Atlanta, Ga., plans by Yo Hart, Thiesen Bldg., Pensacola, school $48,000. CD 10/1—ENR 10/7.

†**Ga., Augusta**—Federal Works Agen Fifth St. N.W., plans by Scroggs & S F C Bldg., University hospital $175,000.

†**Ga., Brunswick**—Federal Works A 20 Fifth St., Atlanta, recreation bldg.

†**Ga., Macon**—Pub. Housing Auth., Georgia Savings Bank Bldg., Peachtree Broad Sts., Atlanta, 252 dormitories. Ga. 1,960 family dwelling units, Ga. 9167.

†**Ga., Warner Robins (Macon area)**—Owners' Loan Corp., 114 Marietta St. A 300 family unit conversion program.

†**Illinois**—Pub. Housing Auth., NHA, N. Wells St., Chicago, plans by Loe Schlossman, 333 N. Michigan Ave., C trailer unit housing. Ill. 11-206.

†**Ill., Macomb**—Federal Works Agen N. Wacker Dr., Chicago, recreation $67,000 gr.

†**Indiana**—Chevrolet Corp., J. Coyle, Anderson, reconditioning large bldgs. for chine operations, $200,000 or more incl Federally financed.

★†**Indiana**—Pub. Housing Auth., NHA, N. Wells St., Chicago, Ill., plans by & Wright, 926 Architects & Bldrs., Indianapolis, housing, $525,000; plans by Guire & Shook, 1400-01 Fletcher Trust Indianapolis, housing, $400,000. CD ENR 10/21.

†**Ind., Evansville**—Pub. Housing NHA, 201 N. Wells St., Chicago, family dwelling units, Ind. 12181.

†**Ind., Fort Wayne**—Home Owners' Corp., 336 N. Wells St., Chicago, Ill., ily unit conversion program.

†**Ind., Indianapolis**—Home Owners' Corp., 336 N. Wells St., Chicago, family unit conversion program.

**Ind., Richmond**—Reid Memorial hospital addn. $300,000.

★†**Louisiana**—Pub. Housing Auth., 1205 Electric Bldg., 7 and Taylor Fort Worth, Tex., housing. $800,000.

†**La., Lake Charles**—Calcasieu Parish Bd., school bldg. $150,000. FWA.

†**La., Leesville**—City, plans by Dun Quinn, 827 Hodges St., Lake Charles, tion bldgs., one La. 16-248, $32,000. La. 16-249, $42,800. FWA. CD 9/2.

**La., Winnfield**—Electric light plant and distr. sys., watermain water plant imprvs. $260,000. J. M. Hammond, engr.

†**Md., Baltimore** — Federal Works 601 State Planters Bank Bldg., Va., 1 story school, Fairfield section.

†**Michigan**—Pub. Housing Auth., NHA, E. 9 St., Cleveland, O., plans by Co., Eddy Bldg., Saginaw, temporary dwellings, MI 20219. CD 10/13—ENR

BLDGS. (Proposed Work, Cont'd.)

**Homer**—Homer School Dist. 1, com- plans by L. J. Sarvis, Battle Creek, concrete school bldg. $267,500. CD ENR 10/21.

**Royal Oak**—Pub. Bldgs. Admin., 18 Sts. N.W., Wash., 25, D. C., health bldg. Docket Mich. 20-298. **FWA.**

**Missouri**—General Cable Corp., 420 Lex- ton Ave., New York, N. Y., addnl. plant Approx. $530,000. Defense Plant finance.

**Kearney**—Home Owners' Loan Corp., of the World Bldg., Omaha, 26 unit conversion program.

**Pioche**—Pub. Housing Auth., NHA, ket St., San Francisco, Calif., 30 dwelling units. Nev. 26158; 50 family units, Nev. 26159.

**Jersey**—Pub. Housing Auth., NHA, y., New York, 7, N. Y., rejected bids infirmary bldg., N.J.-28024. I. 191 Bway., Long Branch, archt. CD NR 8/5.

**Clovis**—R. B. Worthington, city ty Hall, plans by Schaefer & Merrill, hospital addn. Applied for FWA

**Y., Albany**—Federal Works Agency, k Ave., New York, Zone 17, plans by Gander & Gander, 17 Steuben St., nurses training school.

**Y., Utica**—Pub. Housing Auth., NHA, y., New York, Zone 7, 150 unit fam- ing, NY-30171.

—The American Welding & Mfg. Co., addnl. plant facilities. Approx. $30,- Defense Plant Corp. will finance.

—Pub. Housing Auth., NHA, 2073 Cleveland, plans by Akron Associated cts. First Central Tower, Akron, ary family dwellings, Ohio 33280. CD NR 9/23.

—Pub. Housing Auth., NHA, 2073 E. eveland, plans by Columbus Associated cts. 2901 N. High St., Columbus, tem- family dwellings, Ohio 33285. CD ENR 10/14.

—Pub. Housing Auth., NHA, 2073 E. eveland, plans by Associated Housing cts. 1020 Schofield Bldg., Cleveland, prs. and mobile trainer unit housing, 231 C. CD 9/22—ENR 9/30.

on—Pub. Housing Auth., NHA, Skin- g., 5 Ave. and Union St., Seattle, 1, plans by Stokes & Allyn, Hughes Portland, trailer housing, Ore. 35285. 4—ENR 10/21.

on—Pub. Housing Auth., NHA, Skin- g., 5 Ave. and Union St., Seattle, 1, plans by R. L. Morin, Public Service Portland, family and trailer housing, 286-87. CD 10/14—ENR 10/21.

sylvania—Garnet Chemical Corp., 915 ber St., Allentown, addnl. plant fa- $25,000. Defense Plant Corp. will

**Sharon and Farrell**—Home Owners' Corp., 2 Park Ave., New York, N. Y., ily unit conversion program.

**Sharon and Farrell**—Pub. Housing NHA, 270 Bway., New York, 7, N. Y., rmanent family dwelling units, Pa.

**C., Charleston**—Pub. Housing Auth., Georgia Savings Bank Bldg., Peachtree oad Sts., Atlanta, Ga., plans by H. 34 Broad St., school bldgs., SC 38-213.

**., Charleston**—Federal Works Agency, St., Atlanta, Ga., bids soon, service recreational center, incl. telephone waiting room space, storeroom, work- cilities.

**., Pierre**—State Dpt. Health plans by & McWayne, Sioux Falls, health cen- g. $243,100. Applied for FWA funds. 13.

**s**—Pub. Housing Auth., NHA, 1205 Bldg., Seventh and Taylor Sts., Fort plans by Salisbury, McGinty & Werlin, Gray Ave., Houston, child welfare facilities, Tex. 41-171 and 41-706.

**s**—Pub. Housing Auth., NHA, 1309 Bldg., Seventh and Taylor Sts., Fort plans by W. B. Livesay, San Jacinto dg., Beaumont, family dwelling units, & Burges, Century Bldg., Fort Worth,

**s**—U. S. Eng., Fort Sam Houston, Bexar Co.

**s**—U. S. Eng., 416 Wright Bldg., 2, Okla., bldgs., utilities, facilities, 906-44-7, Dallam Co.

**Ft. Worth**—Bd. Educ., City Hall, W. G. Clarkson, First National Bank mechanical vocational school unit. Applied for FWA funds.

**Blackstone**—Federal Works Agency, te Planters Bank Bldg., Richmond, , sketches made by A. M. Lublin, Bldg., Norfolk, public health center, 348. $17,200.

**Norfolk**—City, Granby St. High School $62,200 and Titustown School addn., FWA.

**shington**—King County Housing Auth., d Cherry Bldg., Seattle, Zone 4, hous- n., for NHA. $1,000,000.

★**†Washington**—Seattle Housing Auth., 825 Yesler Way, Seattle, Zone 4, plans by Jones, Bouillon, Thiry & Shay, Hoge Bldg., Seattle, Zone 4, Duwamish Bend housing addn., for NHA. $600,000.

★**†Washington**—Seattle Housing Auth., 825 Yesler Way, Seattle, Zone 4, plans by McClelland & Jones, Republic Bldg., Seattle, Zone 1, housing, child service bldg. as addn. to Stadium Homes Development, etc., for NHA. $1,600,000.

**†Wash., Metaline Falls** — Home Owners' Loan Corp., Pacific Bldg., San Francisco, 88 family unit conversion program.

**†Wash., Port Orchard**—Pub. Bldgs. Admin., 18 and F Sts. N.W., Wash., 25, D. C., plans by Naramore & Brady. Dexter Horton Bldg., Seattle, Zone 4, addns. to Silverdale, Chico and Tracyton Schools. $100,000. **FWA.**

★**†Wisconsin**—RMR Corp., Madison, plant facilities. $785,000. Defense Plant Corp. will finance.

**†Wis., Racine-Kenosha**—Pub. Housing Auth., NHA, 201 N. Wells St., Chicago, Ill., 150 stopgap housing, Wis. 47073.

**Alta., Calgary**—Dom. Government, Ottawa, Ont., plans by architect, c/o Dominion Housing Admin., Dpt. Finance, Ottawa, Ont., housing conversion project. $150,000.

**N. B., Moncton**—Dom. Government, Ottawa, Ont., plans by architect, c/o Dominion Housing Admin., Dpt. Finance, Ottawa, Ont., housing conversion. $150,000.

**N. S., Halifax**—Dom. Government, Ottawa, Ont., plans by architect, c/o Dominion Housing Admin., Dpt. Finance, Ottawa, Ont., housing conversion project. $150,000.

**Ont., Hamilton**—Dpt. Munitions & Supply, Ottawa, housing. About $150,000.

**Ont., Ottawa**—Dpt. Munitions & Supply, Ottawa, housing. $250,000.

★**Ont., Toronto**—Municipality, 1,000 low-priced dwellings. $3,000,000.

**Quebec**—Dom. Government, Ottawa, Ont., plans by Dpt. Naval Services, Cartier Sq., Ottawa, Ont., power house. $40,000.

**Que., Carleton**—Providence of Quebec, c/o Ministry of Fisheries, Quebec City, plans by G. F. Caron, 142 St. John St., Quebec City, refrigerator warehouse, equip.

**Que., Levis**—Hotel Dieu Hospital Bd., 143 Wolfe St., Levis, plans by L. P. Leversque, 130 Turnbull St., Quebec City, hospital exten.

★**Que., Montreal**—Bd. Governors of McGill University, Sherbrooke St. W., library exten., addnl. residential accommodation and constructing Geology and Mining Bldg. $750,000.

## BIDS ASKED

*Bids Asked After October 28*

**†Pa., Warminster**—Federal Works Agency, 101 Park Ave., New York, 17, N. Y., school. $138,500. **FWA.** D. Supowitz, 246 S. 15 St., Phila., archt. CD 10/21—ENR 9/9.

*Bids Asked After November 1*

**†Pennsylvania**—McCreary Tire & Rubber Co., H. C. McCreary, pres., Indiana, 2 story, 80x100 ft., rein.-con. automobile tire mfg. plant addn. $160,000 incl. equip. Defense Plant Corp. will finance. Plans & Machine Design Co., 1213 Majestic Bldg., Detroit, Mich., archts. CD 10/20.

*Bids Asked November 2*

**†Pennsylvania**—Pub. Housing Auth., NHA, 270 Bway., New York, 7, N. Y., community and administration bldgs., Pa. 36042 and 36044. Lovelace & Spellman, 103 W. Broad St., Bethlehem, archts. CD 10/7—ENR 10/14.

**†South Carolina**—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., fire station.

*Bids Asked After November 2*

**†Pennsylvania**—Allegheny County Bldg., Pittsburgh, community and child care bldgs., Pa. 36221, for NHA. Plans deposit $25.

*Bids Asked November 4*

**B. C., Esquimalt**—Secy. Dpt. Munitions & Supply, Ottawa, Ont., bldgs. and work exterior of bldgs. at W. R. C. N. S. Establishment, for Dpt. National Defense (Sea), Ottawa, Ont. About $175,000.

*Bids Asked November 5*

**†New Hampshire**—Pub. Housing Auth., NHA, 24 School St., Boston, Mass., store bldg. for housing, NH 27013. Plans deposit $50 first set, and $10 each addnl. set. M. E. Witmer, Hillside Dr., Portsmouth, archt. CD 9/28—ENR 9/30.

**†New Jersey**—Pub. Housing Auth., NHA, 270 Bway, New York, 7, N. Y., family housing, N. J. 5-3. $300,000. Extended date. Micklewright & Mountford, 219 E. Hanover St., Trenton, archts. CD 10/8—ENR 10/14.

**†Pennsylvania**—Allentown Housing Auth., Hanover Acres, Allentown, dwellings, Pa. 36438, for NHA. G. E. Yundt, 16 S. 6 St., Allentown, archt. CD 10/21—ENR 9/30.

*Bids Asked November 8*

**†Michigan**—Pub. Housing Auth., NHA, 2073 E. 9 St., Cleveland, O., temporary family dwelling units, Mi. 20218. Plans deposit $50. Francis Engineering Co., Eddy Bldg., Saginaw, archts. CD 10/6—ENR 10/14.

**†Ohio**—Public Housing Auth., NHA, 2073 E. 9 St., Cleveland, temporary family dwelling units, Ohio 33274. Plans deposit $50. Garfield, Harris, Robinson & Schaefer, National City Bldg., archts. CD 9/22—ENR 9/30.

*Bids Asked November 9*

**†California** — Los Angeles Co. Housing Auth., 1401 E. 1 St., Los Angeles, temporary family dwelling units, Calif. 4766. Wm. Allen & W. G. Lutzi, 5655 Willshire Blvd., Los Angeles, archts. CD 10/20—ENR 9/9.

**†Pa., Titusville**—Titusville Hospital Assn., A. M. Warner, chn. Bldg. Comrs., Titusville, 2 story, bsmt., 45 x 115 ft., brick, rein.-con. hospital addn., $150,000. **FWA.** Plans deposit $25. C. F. Owsley, 211 N. Champion St., Youngstown, archt. CD 10/5—ENR 10/7.

*Bids Asked November 10*

**†Arizona**—Housing Auth. of Mohave Co., Court House, Kingman, 40 family dwelling units, Ariz. 2331, for NHA. Lescher & Mahoney, Title & Trust Bldg., Phoenix, archts. CD 9/21—ENR 9/23.

**†Michigan**—Pub. Housing Auth., NHA, 2073 E. 9 St., Cleveland, O., temporary family dwellings, Mi. 20036. Plans deposit $50. Harley, Ellington & Day, Stroh Bldg., Detroit, archts. CD 10/8—ENR 10/14.

**†Wash., Seattle**—Pub. Bldgs. Admin., 18 and F Sts. N.W., Wash., 25, D. C., school at Rainier Vista housing, $23,500. Holmes & Bain, Old Times Bldg., Zone 1, archts. CD 10/1—ENR 10/7.

*Bids Asked November 11*

**†Michigan**—Pub. Housing Auth., NHA, 2073 E. 9 St., Cleveland, O., temporary family dwellings, MI. 20222. Plans deposit $50. Herman & Simon, 131 Lafayette Blvd., Detroit, archts. CD 10/8—ENR 10/14.

*Bids Asked November 12*

**Man., Winnipeg**—Secy. Dpt. P. Wks., Ottawa, Ont., constructing Nos. 1 and 2, active treatment pavilions at Deer Lodge Military Hospital. $300,000. Plans deposit $50.

*Bids Asked November 13*

**†Colorado**—Pub. Housing Auth., NHA, Dierks Bldg., 1006 Grand Ave., Kansas City, Mo., family dwelling units, Colo. 5109. Extended date. Over $300,000. T. H. Buell & Co., 730 14 St., Denver, archts. CD 10/12—ENR 10/14.

**†Michigan**—Pub. Housing Auth., NHA, 2073 E. 9 St., Cleveland, O., temporary family dwellings, Mi. 20180. Plans deposit $50. Extended date. O. Winn & P. Brezner, Highland Park, archts. CD 10/1—ENR 10/7.

*Bids Asked After November 15*

**†Pennsylvania**—Pub. Housing Auth., NHA, 270 Bway., New York, 7, N. Y., family dwellings, Pa. 36439. W. L. Murray, 1100 N. 3 St., Harrisburg, archt. CD 10/14—ENR 10/21.

*Bids Asked November 16*

**†South Carolina**—Charleston Housing Auth., 20 Franklin St., Charleston, 4 school bldgs., for **FWA** SC 38213, on site housing SC 38026, for NHA. Plans deposit $50. H. C. Tatum, 34 Broad St., Charleston, archt. CD 9/30—ENR 10/7.

**†Wisconsin**—Pub. Housing Auth., NHA, 201 N. Wells St., Chicago, Ill., portable houses, Wis. 47072. F. J. Hoffman, 201-6 St., Racine, archt. CD 10/8—ENR 10/14.

*Bids Asked November 18*

**†Michigan**—Pub. Housing Auth., NHA, 2073 E. 9 St., Cleveland, O., temporary family dwellings, MI. 20212. Plans deposit $50. Malcolmson, Calder & Hammond, Inc., 1217 Griswold St., Detroit, archts. CD 10/19—ENR 10/21.

*Bids Asked*

**†Connecticut**—Pub. Housing Auth., NHA, 24 School St., Boston, Mass., sewage collection disposal sys., Conn. 6083 and 6084. Over $25,000. Payne & Keefe, 231 State St., New London, archts. CD 10/22.

**†Connecticut**—U. S. Eng., 319 Industrial Trust Bldg., Providence, R. I., (selected bidders), bldg., No. 44-45, Hartford Co.

**†Massachusetts**—Bethlehem Steel Co., E. Howard St., Quincy, (selected list bidders), 1 story, 55x175 ft., brick, steel, concrete turrett bldg., altering canteen and commissary. Over $40,000. Federally financed.

## LOW BIDDERS

★**†California**—City of Oakland Housing Auth., 935 Union St., Oakland, Oct. 18, family dwelling units, Calif. 4749, 4770 and 4771, for NHA, from Standard Building Co., 1500 Judah St., San Francisco, **$1,343,579.** CD 10/5—ENR 10/7.

★**†California**—Pub. Housing Auth., NHA, 735 Market St., San Francisco, Oct. 21, family dwelling units, Calif. 4751 from Moore & Roberts, 693 Mission St., San Francisco, **$2,819,523.** CD 10/11.

★**†Illinois**—Chicago Housing Auth., 308 S. LaSalle St., Chicago, Oct. 19, housing, Ill., 2-7, for NHA, from B-W Constr. Co., 207 N. Michigan Ave., Chicago, and Sherry-Richards Co., 201 N. Wells St., Chicago, **$7,597,000.** CD 9/27—ENR 9/30.

**†Maine**—Pub. Housing Auth., NHA, 24 School St., Boston, Mass., Oct. 18, sewage treatment plant, site imprvs., etc., trailer camp, for housing, Me. 17034, from Farina

PUBLIC BLDGS. (Low Bidders, Cont'd.)

Bros., 61 Bridge St., Newton, Mass., **$55,785.** CD 10/11—ENR 10/14.

**†Maryland**—Pub. Housing Auth., NHA, Temporary Bldg. 2, 19 and D Sts. N.W., Wash., D. C., Oct. 18, family dwellings, Md. 18272, from Landrith Constr. Co., P. O. Box 930, Alexandria, Va., **$189,933.** CD 9/9—ENR 9/16.

★**†Nebraska**—Pub. Housing Auth., NHA, Dierks Bldg., 1006 Grand Ave., Kansas City, Mo. Oct. 18, family housing, community bldg., Neb. 25074, from Steenberg Co., W. 1757-1st Natl. Bank Bldg., St. Paul, Minn., **$709,800.** CD 9/27—ENR 9/30.

**†Ohio**—Pub. Housing Auth., NHA, 2073 E. 9 St., Cleveland, housing, for Lorain Pub. Housing Auth., Lorain, from Weinstein Constr. Co., 573 E. TaMmadge St., Akron, **$361,700.** CD 9/8—ENR 7/29.

## CONTRACTS AWARDED

**†California**—San Joaquin Housing Auth., 123 N. ElDorado St., Stockton, family dwelling units, Calif. 4741, for NHA, to Lawrence Constr. Co., 3020 V St., Sacramento, **$326,542.** Bids 10/5, awarded 10/18. CD 9/3—ENR 9/9.

**†Calif., Hunters Point**—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., boiler, blacksmith shop and bldg. exten., MDD, NOY 6917, to Nellsen, Erbentraut & Summers, 446 6 St., San Francisco, **$96,000.**

**†Calif., Miramar**—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., cold storage bldg., MCAD, NOY 6995, to Jackson Bros. & LeSage, 547 S. Fairfax St., Los Angeles, **$53,950.** CD 9/1.

★**†Connecticut** — Chance-Vought Aircraft Div., United Aircraft Corp., 550 Main St., Stratford, 2 story assembly plant addn., to Edwin Moss & Son, Inc., 555 Grant St., Bridgeport, est. **$1,500,000;** laboratory alterations, imprvs., to John W. Ryan Constr. Co., Inc., 369 Lexington Ave., New York, N. Y., **$187,000.** Defense Plant Corp will finance. CD 10/8 and 10/11—ENR 10/14.

**†Connecticut**—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., bldgs., etc., Spec. 12027, NOY 7169, to F. H. McGraw & Co., 780 Windsor St., Hartford, **$58,000.** Bids 10/14. (**Correction**—contractor.) CD 10/19—ENR 10/21, under CA.

**†Florida**—U. S. Eng., Grant St. west of Westwood St., Mobile, Ala., bldgs., Leon Co., to Black & Green, Troy, Ala., **$43,000.**

**†Fla., Miami**—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., concrete magazines and access roads, N.A.S., NOY 6225, to M. R. Harrison Constr. Corp., 309 Mechanics Blvd., Petersburg, **$43,300.**

**†Ga., Dublin**—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., 8 ward bldgs., Naval Hospital, NOY 6947, to Beers Constr. Co., 70 Ellis St. N.W., Atlanta, Ga. **$1,160,000.**

**†Iowa**—U. S. Eng., 1709 Jackson St., Omaha, Neb., utilities for housing, Kossuth Co., to Kramme & Jensen Const. Co., 1901 Easton Blvd., Des Moines, under **$200,000.**

**†Maryland**—Triumph Explosives, Inc., Elkton, heating plant, Project 3, to Elkton Contractors, Elkton, for Navy Dpt. Est. **$50,000.**

**†Massachusetts**—Clifford Mfg. Co., 564 E. 1 St., South Boston, brick research laboratory, to Aberthaw Co., 80 Federal St., Boston. Est. over **$40,000.** Defense Plant Corp. will finance. D. D. Eames, 739 Boylston St., Boston, engr. CD 9/22—ENR 9/30.

**†Massachusetts**—U. S. Eng., 819 Industrial Trust Bldg., Providence, R. I., bldgs.. No. 51W-37-018-ENGR 51, Hampden Co., to Ley Constr. Co., 1215 Main St., Springfield. Est. **$100,000-$500,000.** Bids 10/11. CD 10/7.

**†Mass., South Boston (sta. Boston)**—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., temporary storehouse, N O D, NOY 7470, to Matthew Cummings Co., 38 Chauncy St., Boston, **$255,000.** CD 10/25 under CA.

**†Michigan**—Pub. Housing Auth., NHA, 2073 E. 9 St., Cleveland, O., drainage work for housing, Mi. 20209, to Central Excavators, Inc., Ypsilanti, **$20,738.**

**†Michigan**—Pub. Housing Auth., NHA, 2073 E. 9 St., Cleveland, O., temporary family dwellings, Mi. 20213 A, to Mayfair Const. Co., 3114 W. Devon St., Chicago, Ill. **$338,000** (90 day completion). Awarded 10/20. CD 9/22—ENR 9/30.

**†Mississippi**—Pub. Housing Auth., NHA. Georgia Savings Bank Bldg., Peachtree and Broad Sts., Atlanta, Ga., dormitory, prefabricated family housing, community facilities, to A. Blair, 1st Natl. Bank Bldg., Montgomery, Ala., **$424,322.** CD 9/17 and 6/23—ENR 9/23 and 7/1 respectively.

★**†New Jersey**—U. S. Eng., 120 Wall St., New York, 5, N. Y., bldgs., Somerset Co., to Andrew Christensen & Sons, 1140 E. Jersey St., Elizabeth, **$500,000.** Bids 10/16.

★**†Ohio**—Pub. Housing Auth., NHA, 2073 E. 9 St., Cleveland, temporary family dwellings, Ohio 33273, to Caristo Const. Corp., 26 Court St., Brooklyn, N. Y., **$1,212,000.** Bids 10/18, awarded 10/21. CD 10/22, under LB—ENR 9/30.

★**†Oregon**—Pub. Housing Auth., NHA, Skinner Bldg., 5 Ave. and Union St., Seattle, 1, Wash., temporary family housing, Ore. 35279, to Wegman & Son, Bd. Trade Bldg., Portland, **$2,250,000.** CD 9/20—ENR 9/23.

**†Rhode Island**—U. S. Eng., 819 Industrial Trust Bldg., Providence, bldg. and bldg. addn. No. 44-46, Newport Co., to E. Turgeon Co., 614 Turks Head Bldg., Providence. Est. **$50,000-$100,000.** CD 10/19—ENR 10/21.

**†Tennessee**—Firestone Tire & Rubber Co., J. E. Davis, vice. pres., Firestone Blvd., Memphis, airplane tire mfg. plant, to S & W Constr. Co., Shrine Bldg., Memphis. Est. over **$50,000.** Federally financed. CD 9/14—ENR 9/16.

**†Texas**—U. S. Eng., Fort Sam Houston, addnl. bldgs., facilities, utilities, etc., Webb Co., to C. L. Browning, Jr., 812 Insurance Bldg., San Antonio, **$175,500.**

**†Virginia**—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., addnl. recreational facilities, section base, Little Creek, NOY 7019, to R. A. Richardson & Co. Inc., National Bank of Commerce Bldg., Norfolk, **$79,864.**

**†Virginia**—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., security items, NSD, Cheatham Annex, Penniman, NOY 7159, to Central Automatic Sprinkler Co., 247 E. Ashmead St., Phila., Pa., **$159,812.**

**†Va., Yorktown**—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., barricaded trans-shipment bldg., Naval Mine Depot, NOY 7207, to Virginia Engineering Co., 330 28 St., Newport News, **$131,000.**

**†Wisconsin**—Metal-Mold Corp., Cedarburg, brick, steel plant addn., concrete fdn., to Permanent Const. Co., W. Capitol Dr. and N. 3 St., Milwaukee, Zone 12. Est. **$200,000.** Defense Plant Corp. will finance. E. A. Abendroth, 1140 E. Bywater Lane, Milwaukee, engr. CD 9/22—ENR 9/30.

★**†United States**—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., housing units for transient personnel, various locations, NOY 7891, to Byrne Organization, Hampton Blvd., Norfolk, Va., **$1,300,000.**

**B. C., North Vancouver (Vancouver)**—Wartime Housing, Ltd., 135 E. 2 St., North Vancouver, 50 dwellings, to Bennett & White Constr. Co., Ltd., 510 W. Hastings St., Vancouver, **$160,000.**

**B. C., Victoria**—Wartime Housing, Ltd., 55 York St., Toronto, Ont., 50 dwellings, installing necessary sewage and road facilities, to Bennett & White Constr. Co. Ltd., 510 W. Hastings St., Vancouver, **$160,000.**

**Que., Montreal** — Dpt. National Defense (Army), Ottawa, Ont., personnel accommodations at No. 4 Military Dist., to Richard & B. A. Ryan, Ltd., 1808 William St., **$200,000.**

**Que., Montreal**—Dominion Govt., c/o Ministry of Munitions & Supply, Ottawa, Ont., barracks, to R. & B. Ryan, Ltd., 1808 William St., **$200,000.** Dpt. National Defense, Cartier Sq., Ottawa, Ont., archts.

**Que., Montreal (Bordeaux)**—Dpt. Roads, Quebec City, repairs, exten. to garage, 625 Kelly St., Bordeaux, to J. H. Dupreis, Ltd., 620 Cathcart St., Montreal, **$51,935.**

★**Que., St. Laurent (Postal Dist. Montreal)**—Dominion Govt., c/o Ministry of Munitions & Supply, Ottawa, Ont., 2½ story, 67x202 ft., frame, brick penicillin mfg. plant, concrete fdn., to Foundation Co. of Canada, Ltd., Sherbrooke St. W., Montreal. To exceed **$500,000.** CD 10/13—ENR 10/21, under Montreal.

# COMMERCIAL BUILDINGS

## PROPOSED WORK

**Calif., Long Beach**—Rynes Constr. Co., c/o C. N. Aldrich, archt., 1834 Dawson Ave., twenty 4-unit frame, stucco apartment bldgs. Over $150,000.

**Calif., Santa Monica**—B. W. Tye Co., 9030 Wilshire Blvd., Beverly Hills, twenty-five 4 family, frame, stucco apartment bldgs. $250,000.

**Ga., Columbus**—United Brotherhood of Carpenters & Joiners of America, c/o L. E. Koon, pres. Local Union 1723, plans by W. D. Talley, Columbus, bldgs. $150,000.

**Mass., Fall River**—Joseph P. Duncan Estate, Academy Bldg., rebuilding Hotel Mellen, destroyed by fire. $150,000.

**Miss., Biloxi**—Miramar Homes, Inc., c/o Supt., on bldg. site, near Division and Crawford Sts., and W. Marshall Moore, genl. mgr., 2760 S. Boulevard, Charlotte, N. C., 101 family dwelling units. $250,000. FHA.

**O., Cleveland**—2530 North Moreland Co., c/o Chas. Bernstein, Hippodrome Bldg., soon lets contract four 3 story, bsmnt., brick apartment bldgs. $400,000. G. H. Burrows, 3113 Moreland Blvd., archt. CD 4/6—ENR 4/8.

**Tex., Fort Worth**—Westgate, Inc., 3228 Hamilton St., 6 two story, 37x34 ft., brick, frame apartment bldgs. $150,000 complete.

**Tex., Houston (Montrose Section)**—W. Silvers, c/o Jack & Gill Liquor Store, 1421 Richmond St., Houston, soon lets contract ten 4-unit apartment houses, facilities, $150,000. CD 10/15—ENR 10/21.

**Tex., McAllen**—Missouri Pacific R. R., F. E. Bates, ch. engr., Missouri Pacific R. R., St. Louis, Mo., passenger and freight s...

**Tex., Pharr**—Missouri Pacific R. R., F. E. Bates, ch. engr., Missouri Pacific R. R., St. Louis, Mo., passenger and freight s...

**Tex., San Antonio**—House Plan Bureau, Alamo Natl. Bank Bldg., San Antonio, seven 1 story, frame duplex houses.

**Wash., Tacoma**—Bainbridge Corp., 1... 45 St., 30 dwelling units, $150,000.

**Wis., Racine**—Emmanuel Evang. Congregation, 1649 Superior St., ... H. C. Haeuser, 759 N. Milwaukee St., Milwaukee, 1 story, 100x220 ft. church and hall remodeling. About $150,000.

**Ont., Kingston**—Max Simon & S. J. and Herman Schriellmann, Kingston, constructing store, 176 Princess St., destroyed fire. $175,000-$200,000.

★**Ont., London**—University of Western Ontario. London, plans by O. Ray ... 489 Richmond St., London, 2 bldgs., ... taining chapel, common lecture rooms ... and offices and a student residence ... Huron College (Anglican). $517,000.

**Que., Montreal**—Sanatorium Prevost, c/o L. Lesparance, 107 Craig St., sanatorium $150,000.

## CONTRACTS AWARDED

**Calif., Compton**—Jewett Bros., 204 N. ... Ave., Fullerton, 45 frame, stucco dwellings. Owner builds. Over $150,000. C. N. Aldrich, archt., 1834 Dawson Ave., Long Beach, archt.

**Calif., Long Beach**—Artcraft Builders, ... S. Western Ave., Los Angeles, 70 frame, ... duplex dwellings. Owner builds. $150,000.

**Calif., Los Angeles**—F. E. Cooney, ... Main St., Los Angeles, 53 frame, ... dwellings, to D. M. McDaniel, 657 W. ... approx. **$175,000.**

**Calif., Newball**—Bermite Powder Co., ... hall, fifteen 5 room and thirty-seven 6 ... frame, stucco dwellings. Owner builds ... supervision C. DeWitt, 1203 6 St., San ... nardo. **$200,000.** G. J. Fosdyke, 112 N. ... St., Los Angeles, engr.

★**Calif., Oxnard** and **Hueneme** — ... Constr. Co., 5225 Wilshire Blvd., ... Angeles, 200 frame, stucco and frame, ... dwellings. Owner builds, **$600,000.**

**Calif., South Gate**—Apex Bldg. Co., ... Crenshaw Blvd., Los Angeles, 155 ... stucco dwellings. Owner builds. Over ... **000.** R. S. Loring, 7411 Beverly Blvd., ... Angeles, archts. W. G. Chandler, 7411 ... erly Blvd., Los Angeles, engr.

★**N. J. Trenton**—Lalor Town, Inc., 70 ... man Ave., Deal, one hundred three ... story, brick on cinder block residences, ... rate contracts, **$556,200.**

**O., Cleveland**—Riverside Garden Apartments Co., M. Levan, secy., 200 Engineers Bldg., ... pentry work for two 2 story, brick apartment ... bldg., to Chas. Horwitz, 1049 E. 125 St., ... **$200,000.** J. A. Gattozzi, 2000 W. 25 St., ...

**O., Cleveland Heights**—Noble Quillman, ... M. Levan, 200 Engineers Bldg., Cleveland, ... pentry work for two 3 story bsmnt. apartment ... bldg., to Chas. Horwitz, 1049 E. 125 St., ... Cleveland. Est. **$200,000.** J. A. Gattozzi, ... 2000 W. 25 St., Cleveland, archt. CD ... ENR 8/12.

★**Tex., Brownsville**—Jackson & Davis, ... Greenville Ave. at University Bldg. Dallas, ... 109 brick, rein.-con. dwellings, street ... gas, sewer, water, electric lines. Owner builds. ... **$150,000.** Total $575,000. CD 10/12— ... 10/21, under CA.

**Tex., Del Rio**—House Plan Bureau, ... Alamo Natl. Bldg., San Antonio, 39 one ... dwellings, concrete fdns., utilities, site ... velopment, etc. Owner builds. **$200,000.** ... 10/18—ENR 10/21.

**Tex., San Marcos**—San Marcos Hotel ... Corp., 412 Alamo Natl. Bldg., San Antonio, ... one story, dwellings. Owner builds. $... CD 10/18—ENR 10/21.

**Ont., Hamilton**—Alders Furniture Ltd., ... Ottawa St., store addn., to MacKay Bros., ... 715 E. Main St.

# INDUSTRIAL BUILDINGS

## PROPOSED WORK

**Ark., Harrison**—FACTORY—Ozark Co-operative Dairy Goat Producers Assn., C. G. Mclough, pres., Harrison, cheese factory. $...

**Calif., Oakland**—WAREHOUSES—Western Pacific R.R. Co., T. L. Phillips, ch. engr., ... Mission St., San Francisco. 2 ware... $70,000.

**Conn., Bridgeport**—BUS GARAGE—Chestnut Hill Bus Corp., E. Argamese, 6... St., sketches bus garage, repair facilities, office, Albemarle Pl.

**Conn., Bridgeport**—FACTORY—Owner, G. N. Foster & J. P. Bartram, agent, ... St., brick factory units, Brewster St. ... $40,000.

**Conn., Moodus** — FACTORY — Leer-Mills, Inc., Lees Mfg. Co., Richmond ... Ave., Westport, 4 story, brick factory, $...

TRIAL BLDGS. (Proposed Work, d.)

**Des Moines**—PLANT—Hargrove Co., 4 York Sts., Des Moines, farm imple- ant. Over $40,000.

**Sioux City**—FACTORY—Master Refrig- Locker Systems, Inc., W. W. Wilson, 117-9 Main St., rebuilding factory, in- equip. Over $100,000.

**H., Claremont**—STORAGE PLANT— c/o Mrs. Carl Chellis, Claremont, freezing facilities, 400 frozen food lock-

**Jersey** — PLANT — American Type rs (Div. Munitions), 200 Elmora Ave., th. plans by C. Godfrey Poggi, 287 Mor- Elizabeth, 1 story, brick munitions ddn.

**Y., Bainbridge**—ELECTRIC GENERAT- PLANT—New York State Electric & rp., c/o Wm. Hickling, 62 Henry St., nton, electric generating plant. $2,000,- lbert Assoc., Inc., 412 Washington St., g. Pa., engrs.

**., Merrick**—PLANT—Aerial Products Merrick, completed plans mfg. bldg.

**Neville Island (br. Pittsburgh)**—REN- G—Marcus-Ruth-Jerome Grease Co., H. in, vice pres. and genl. mgr., Neville rebuilding 1 story, brick rendering

**Pittsburgh**—FEED MILL—Harper Feed Inc., M. May, pres., Mr. Haller, chg., St., rebuilding frame feed mill incl. mill, office bldg. $40,000.

**Pittsburgh**—PLANT—Kerotest Mfg. Co., Mueller, pres., A. W. Anderson, purch. 25 Liberty Ave., plans by S. L. Roush, amber of Commerce Bldg., 1 story, brick, tile shop bldg., 2548 Penn. Ave.

**Pittsburgh** — PLANT — Menon Baking Menon, mgr., 900 W. North Ave., 1 smnt., brick baking plant. $40,000.

**Pittsburgh**—STORAGE—F. J. Kress , J. B. McClere, pres., 28 St. and Pittsburgh, 2 story, storage and bldg.

**Sharon** — WAREHOUSE — Routman N. Routman, 8 W. State St., Sharon, bsmnt. furniture warehouse.

**s**—FACTORY—General Tire & Rubber 1708 E. Market St., Akron, O., auto factory. $4,500,000.

**Hawkins (Yantis P. O.)**—PLANT— Oil & Refining Co., Humble Bldg., , and Natural Gasoline Corp., P. O. 69, Tulsa, Okla., 60,000 g.p.d.c., Hi- gasoline plant. $250,000.

**Houston**—PLANT—Coca-Cola Bottling ve Oak St., plant expansion. Over

**San Benito**—PLANT—McDavitt & r, 1101 Roosevelt St., Brownsville, ex- citrus and vegetable packing plant.

**, Ellensburg** — PLANT — Kittitas Co. n's Assn., Ellensburg, powdered milk $40,000.

**, Ellensburg**—FACTORY—Northwest ry Cooperative, c/o H. P. Carstensen, starch factory. $60,000.

**Green Bay**—WAREHOUSE—McDonald Co., 908 W. Bway., plans by G. J. sen & G. C. Coughlen, Columbus, 1 0x370 ft., brick warehouse.

**, Seattle** — PLANT — Isaacson Iron 017 E. Marginal Way, 1 story addn. to rks. $40,000.

**Wausau** — WAREHOUSE — Albrent & Storage Co., 205 Central Bridge St., Oppenhamer & Obel, Wausau, 1 story, , brick, tile warehouse addn., stone

**Kamloops**—MINING—Privateer Mines dams Lake, development of iceland posits, necessary bldgs., pumps, etc.

**Flin Flon**—PLANT—Newcor Mining ing Ltd., Flin Flon, treatment plant, nprvs. $50,000.

**St. Boniface**—PLANT—Prairie Ren- Co. Ltd., St. Boniface, 2 bldgs. re- fire loss, $50,000.

**Winnipeg**—POWER PLANT SLUICE- EPAIRS—Winnipeg Electric Co. Ltd., tric Chambers, sluiceway repairs and nprvs. at Seven Sisters Power Plant.

**Meteghan**—PLANT—E. A. Comeau & , Meteghan, plant addn., alterations,

**Eastons Corners — PLANT — Ottawa** o., Ltd., 393 W. Somerset St., Ottawa, ddn., deep well, concrete storage plant.

**Fire River**—COALING PLANT— n Natl. Rys. Co., B. Wheelwright, ch. Union Station, Toronto, bids rejected 150 ton rein.-con. coaling plant. Will readvertise. CD 8/23—ENR

**Fort William** — SAW MILL — B. Ren- loudy Bay, saw mill, $40,000.

**Matheson**—PLANT—Algo Mines Ltd., ok, treas., St. Thomas, mining plant

**Ont., Port Coldwell**—MINING STRUC- TURES—Chem-Ore Mines Ltd., 156 Yonge St., Toronto, mining structures at three nepheline syenite properties in Jockfish area on North Shore of Lake Superior.

**Ont., Renfrew**—FACTORY—Light Alloys Co., Ltd., c/o D. Wallace Stewart, Renfrew, remodeling existing scale factory to plant for manufacture magnesium products, $70,000.

**Ont., Sault Ste. Marie** — PLANT — Abitibi Power & Paper Co., Ltd., 408 University Ave., Toronto, 62x72 ft. plant addn., 15 ft. high, concrete fdn. $40,000.

**Ont., Stoney Creek**—PLANT—Argos Mfg. Co. Ltd., 7 King St., 2 story 50x150 ft. plant.

**Ont., Tillsonburg** — PLANT — Borden Co. Ltd., Tillsonburg, altering plant bldg. $60,000.

**Ont., Timmins**—PLANT—Northern Frosted Foods & Storage, Ltd., c/o E. C. Brewer, Tim- mins, processing and mfg. plant. $50,000.

**Ont., Toronto**—FACTORY—Industrial Coal- ing Co., Ltd., 842 Eastern Ave., factory addn., $40,000.

**Ont., Toronto** — PLANT — Alpha Aracon Radio Co., Ltd., 101 E. Queen St., plant re- modeling, addn. $40,000.

**Ont., Welland**—FACTORY—Ross Co., Ltd., 7 King St., Welland, plans by N. A. Kearns, 113 Springhurst Ave., Toronto, 2 story, bsmnt., 33x65 ft. brick factory, concrete fdn. $40,000. CD 7/29—ENR 8/5.

**P. E. I., Fortune Bridge**—FACTORY—Francis Bros. Co., Fortune Bridge, factory, $40,000.

**Que., La Tuque**—PLANT—La Tuque Dairy Co., c/o A. Marchand, La Tuque, modern dairy and dairy products plant, Lacroix St. $40,000.

**Que., Montreal**—FACTORY—Lasalle Brown Co. Ltd., 6385 Joques St., factory.

**Que., Montreal** — GARAGE — James Mel- drum, 6645 Sherbrooke St. W., garage and auto repair shop.

**Que., Montreal**—PLANT—Montreal Archi- tectural Iron Works Ltd., 279 Prince St., plant addn. $40,000.

**Que., Rimouski**—FACTORY—Canadian Cod Liver Oil Co., Ltd., Rimouski, concrete fac- tory, concrete fdn. $40,000.

**Que., Ste Croix**—FACTORY—Laroche & Co. Inc., Ste Croix, 3 story, bsmnt., clothing fac- tory, brick, concrete fdn.

**Que., Thetford Mines**—SASH and DOOR FACTORY—C. Leonidas Dion, Thetford Mines, sash and door factory and saw mill.

## BIDS ASKED

**N. J., Hoboken**—PLANT—Bethlehem Steel Co., foot of 14 St., 2 story, brick timekeeper bldg. $50,000.

**Pa., Washington**—METALLURGICAL, etc. —Jessop Steel Co., R. J. Murray, secy. in charge, 500 Green St., 2 story, 36x83 ft., brick on tile metallurgical and research bldg.

**Ont., St. Thomas**—PLANT—Margison & Babcock, engrs., 210 Dundas St., Toronto, cold storage and processing plant exten., for Elgin Growers Co-operative, Ltd., 20 William St. $41,000. CD 9/16—ENR 9/30.

## CONTRACTS AWARDED

**Calif., San Pedro**—CANNERY—French Sar- dine Co., 181 Fish Harbor, cannery, wharf and hoist tower. Owner builds. **$75,000.** Wm. F. Durr, 128½ W. 6 St., archt.

**Calif., Vernon**—FACTORY—Western Gear Works, 2600 E. Imperial Hy., Lynwood, 2 story, 128x256 ft. factory addn., to C. W. Pettifer, 703 W. 14 St., Long Beach. Est. over **$40,000.** J. A. Davies, Ocean Center Bldg., Long Beach, engr.

**Colo., Denver**—PLANT—American Smelting & Refining Co., First National Bank Bldg., 1 story, 34x70 ft., brick, concrete Iridium plant, to N. N. Nielsen, 632 Detroit St. Est. over **$40,000.** C. Francis Pillsbury, Midland Savings Bldg., archt.

**Ill., Chicago**—STOCK HOUSE—Peter Hand Brewery Co., 1632 N. Sheffield St., 4 story, 65x70 ft., brick stock house, to L. J. Graf Constr. Co., 700 N. Michigan Ave., about **$80,000.** Herman J. Gaul & Son, 228 E. Supe- rior St., archt.

**Ill., Hampshire**—WAREHOUSE—The Bor- den Co., Hampshire, warehouse, to Illinois Hydraulic Stone & Constr. Co., 20 N. Crystal St., Elgin. Est. **$40,000.**

**Ind., Wabash**—FACTORY—Container Corp. of America, 111 W. Washington St., Chicago, Ill., 1 story, corrugated board plant, concrete, to Sill Constr. Co., 520 N. Michigan Ave., Chi- cago, Ill. Est. **$40,000.** Awarded 10/13. CD 7/30—ENR 8/5.

**Minn., South St. Paul**—PLANT—Swift & Co., C. A. Custman, genl. mgr., 4 story, meat pack- ing plant, rein.-con., steel, to Paul S. Steenberg Constr. Co., 1757 West First National Bank Bldg., St. Paul, Minn. CD 10/7—ENR 10/14.

**O., Barberton**—PLANT—Seiberling Rubber Co., 345 15 St., rubber plant addn., to Na- tional Concrete Fireproofing Co., Citizens Bldg., Cleveland. Est. over **$40,000.** Albert Kahn Assoc. Engineers and Architects, 345 New Center Bldg., Detroit, Mich., engrs.- archts.

**O., Bedford** — LABORATORY, etc. — Ben Venue Laboratories, Dr. McCullough, Northfield Rd., 1 and 2 story, 63x170 ft., laboratory and office bldg., and 1 story, bsmnt., 48x63 ft. boiler house, to Albert M. Higley Co., 2036 E. 22 St., Cleveland. Est. **$200,000.** P. C. Dowler, Cen- tury Bldg., Pittsburgh, Pa., archt.

**Pa., Aspinwall (br. Pittsburgh)**—PLANT— Railway Maintenance Corp., J. F. McWilliams, in charge, Freeport Rd., 1 story, 40x60 ft. plant addn., to Rose & Fisher Co., 321a McClure Ave. N.S., Pittsburgh.

**Pa., Sharon**—POWER HOUSE, etc.—West- inghouse Elec. & Mfg. Co., G. H. Parkman, dir. Bldg. Constr. and Maintenance, Maloney Bldg., Pittsburgh, 100x104 ft., brick, steel, rein.-con. power house addn., alterations, etc., Proj. 70-1-16-839, to Joseph Bucheit & Sons Co., 819 Mahoning Ave., Youngstown, O. CD 8/10—ENR 8/12.

**Tenn., Nashville**—FREIGHT DEPOT—Louis- ville & Nashville R.R. Co., C. H. Blackman, ch. engr., 9 and Bway., Louisville, Ky., freight depot repairs. Owner builds. **$40,000.**

**Wis., Appleton**—FACTORY—4 Wheel Drive Auto Co., 414 E. Winnebago St., 1 story, 20x100 ft., 16x26 ft., 25x30 ft., brick factory addns., to Steiner Constr. Co., Richmond St.

**Wis., Brillion** — FACTORY — Brillion Iron Wks., Brillion, 1 story, 60x63 ft., concrete fac- tory addn. for foundry and cleaning room, to Oudenhoven & Verbruggen, Kaukauna. CD 9/28—ENR 9/30.

**Wis., Duck Creek (mail Green Bay)**— WAREHOUSE—Stokley Bros. Co., Inc., 941 N. Meridian St., Indianapolis, Ind., 1 story, 87x124 ft., concrete block warehouse, concrete fdn., to Selmer Co., Northern Bldg., Green Bay. R. W. Surplice, 1213 Emilie St., Green Bay, archt.

**Wis., East Troy**—PLANT—Trent Tube Mfg. Co., 1 story, 75x110 ft., crane runway bldg., to Abell-Howe Co., 53 W. Jackson Blvd., Chi- cago, Ill.

**Wis., Green Bay**—WAREHOUSE—McDonald Lumber Co., 908 N. Bway., 1 story, 90x110 ft., brick warehouse addn., day labor. G. J. Feldhausen & G. C. Coughlen, Green Bay, archts. CD 9/21—ENR 9/23.

**Wis., Mayville**—FACTORY—Maysteel Prod- ucts, Inc., Mayville, factory addn., to Rohde- Kapelle Co., Rt. 3. Est. **$40,000.** A. Kuenzi, 202 N. Water St., Watertown, engr. CD 1/7— ENR 1/21.

**Wis., Milwaukee**—FACTORY—Perfex Corp., 500 W. Oklahoma Ave., 1 story, 50x146 ft., brick, factory addn., concrete fdn., to Perma- nent Const. Co., W. Capitol Dr. and W. 3 St., Milwaukee, Zone 12. E. A. Abendroth, 1140 E. Bywater Lane, engr.

**Wis., Oshkosh**—FACTORY—Oshkosh Motor Truck, Inc., 2302 Oregon St., 1 story, 100x100 ft. factory addn., to Edw. H. Meyer Constr. Co., 75 Main St. Awarded 10/8. CD 7/12— ENR 7/15.

**Wis., Oshkosh**—FACTORY—Oshkosh Wood Products Corp., 220 Marion St., 1 story, 73x138 ft., factory addn., with 28x60 ft. and 24x28 ft. wings, for dry kiln, boiler room, to A. R. Ganther, Oshkosh. CD 7/27—ENR 7/29.

**Wis., Spencer**—PLANT—Dairy Belt Cheese & Butter Co., 2 story, 60x83 ft., milk plant addn., 1 story, 33x52 ft., boiler room, concrete fdn., day labor. R. H. Bierman, 3402 W. Thurston Ave., Milwaukee, Zone 9, archt.

**Alta., Bellevue**—PLANT—Hillcrest-Mohawk Colliers, Ltd., Bellevue, washing plant, etc., day labor. **$50,000.**

**Ont., Belmont**—WAREHOUSE, etc.—Borden Co. of Canada, Ltd., Spadina Crescent, To- ronto, 100x100 ft., brick warehouse and de- hydrating plant addn., own forces. About **$40,000.** CD 9/16—ENR 9/30.

**Ont., Toronto**—PLANT—Gutta Percha & Rubber Co., Ltd., West Lodge Ave., plant exten., to A. W. Robertson, Ltd., 57 Bloor St. W., about **$60,000.** CD 12/2—ENR 12/17.

**Ont., Toronto** — WAREHOUSE — Terminal Warehouses, Ltd., 14 York St., warehouse addn., to Redfern Constr. Co., Ltd., 36 Toronto St., Est. **$50,000.**

**Que., Arvida**—PLANT—Aluminum Co. of Canada, Ltd., 1700 Sun Life Bldg., Montreal, rebuilding, constructing aluminum powder plant addn., to Foundation Co. of Canada, Ltd., 1538 Sherbrooke St. W., Montreal, **$123,- 000.** CD 8/16—ENR 8/19.

**Que., Montreal**—PLANT—Ayerst - McKenna and Harrison, Ltd., 485 McGill St., 2½ story, 67x202 ft., brick, terra cotta, penicillin **mfg.** bldg., concrete fdn., to Foundation Co. of Canada, Ltd., 1538 Sherbrooke St. W., about **$175,000.** Ross & MacDonald, 1070 St. Cath- erine St. W., archts.

**Que., Montreal**—PLANT BLDGS.—Canadian Pratt & Whitney Co., Ltd., 1117 St. Catherine St. W., guard house and personnel bldg., to Sutherland Constr. Co., Ltd., 1440 St. Cath- erine St. W., **$42,000.** E. J. Turcotte, 1010 St. Catherine St. W., archt.

**Que., Montreal**—PLANT—Prest-O-Lite Co., Inc., 205 E. 42 St., New York, N. Y., U. S. A., and 159 Bay St., Toronto, Ont., 1 story, 60x102 ft., brick plant, rein.-con. fdn., to W. G. Hunt Co. Ltd., 1405 Bishop St. Est. **$100,000.**

**Que., Ste. Martine**—FACTORY—Co-op So- ciety at DeLin, flax factory, to Guay & Brother, Ltd., 437 Guy St., Montreal, **$72,000.**

***For Proposal Advertisements see pp. 22 & 23***

# OFFICIAL PROPOSALS

*Official notices of bids wanted on construction and related work, equipmment and material for government, state, municipal departments and private enterprises*

**RATE:** THE RATE FOR OFFICIAL PROPOSAL ADVERTISING IS 50 CENTS PER LINE (OR FRACTION) PER INSERTION
**COPY RECEIVED** UP TO 10 A. M. TUESDAY FOR ISSUE OUT THURSDAY SUBJECT TO SPACE OPEN FOR LAST MINUTE ADS
**SEND COPY** TO OFFICIAL PROPOSAL DIVISION, ENGINEERING NEWS-RECORD, 330 W. 42ND ST., NEW YORK, N. Y.

## OFFICIAL PROPOSALS

Bids: November 8, 1943 (189)

### Electrical Work

SOUTH DISTRICT FILTRATION PLANT
DEPARTMENT OF PUBLIC WORKS
CITY OF CHICAGO
CHICAGO, October 15, 1943.

SEALED PROPOSALS will be received by the City of Chicago until 11 A.M. (Central War Time), Monday, November 8, 1943, at Room 406 City Hall, at which time and place all such proposals will be opened publicly and read, for furnishing all labor, materials, equipment and services necessary to perform certain Electrical Work in connection with the construction of the South District Filtration Plant, located on the lake front, east of South Shore Drive and north of East 79th Street, Chicago, Illinois, in accordance with plans and specifications on file in the office of the Department of Public Works of said City, Room 406 City Hall.

In general, said Electrical Work shall consist of furnishing and installing Switchgear, Switchboards, Motor-generator battery charging units, Copper-oxide battery charging units, Storage batteries and racks, Power and lighting transformers, Motor starting and control apparatus, Power and lighting cabinets, Grounding system, Lighting system, Power system, Control, signal and alarm system, Underground duct lines, also, connecting electrical apparatus furnished and installed under other contracts.

Proposals must be made out upon blanks furnished at said office, and be addressed to said Department, indorsed "Proposal for Electrical Work, South District Filtration Plant," and be accompanied with Fifteen Thousand Dollars ($15,000.00) in money or a certified check for the same amount on some responsible bank located and doing business in the City of Chicago and made payable to the order of the Commissioner of Public Works.

Plans and specifications may be obtained upon payment of Fifty Dollars ($50.00) for each set, which will be refunded upon the return of said plans and specifications in good condition within thirty (30) days after the opening of bids. Deposits to be in the form of money or certified check.

In accordance with the provisions of the Act of the General Assembly of the State of Illinois, entitled "An Act regulating wages of laborers, mechanics and other workmen employed under contracts for public works," approved June 26, 1941, the general prevailing wage rates for work at the construction site are set forth in the specifications.

The Commissioner of Public Works reserves the right to reject any or all bids.

No proposal will be considered unless the party submitting the same shall furnish evidence satisfactory to the Commissioner of Public Works of ability, and the possession of the necessary facilities, together with sufficient pecuniary resources, to fulfill the conditions of the contract and specifications.

OSCAR E. HEWITT,
Commissioner of Public Works.

Bids: November 8, 1943 (190)

### Freight Elevator

SOUTH DISTRICT FILTRATION PLANT
DEPARTMENT OF PUBLIC WORKS
CITY OF CHICAGO
CHICAGO, October 15, 1943.

SEALED PROPOSALS will be received by the City of Chicago until 11 A. M. (Central War Time), Monday, November 8, 1943, at Room 406, City Hall, at which time and place all such proposals will be opened publicly and read, for furnishing and erecting one (1) electrically-operated Freight Elevator, of the push-button controlled type, in the Chemical Building of the South District Filtration Plant, located on the lake front, each of South Shore Drive and north of East 79th Street, Chicago, Illinois, in accordance with plans and specifications on file in the office of the Department of Public Works of said City, Room 406, City Hall.

Proposals must be made out upon blanks furnished at said office, and be addressed to said Department, indorsed "Proposal for Freight Elevator, South District Filtration Plant," and be accompanied with Five Hundred Dollars ($500.00) in money or a certified check for the same amount on some responsible bank located and doing business in the City of Chicago and made payable to the order of the Commissioner of Public Works.

Plans and specifications may be obtained upon payment of Ten Dollars ($10.00) for each set, which will be refunded upon the return of said plans and specifications in good condition within thirty (30) days after the opening of bids. Deposits to be in the form of money or certified check.

In accordance with the provisions of the Act of the General Assembly of the State of Illinois, entitled "An act regulating wages of laborers, mechanics and other workmen employed under contracts for public works," approved June 26, 1941, the general prevailing wage rates for work at the construction site are set forth in the specifications.

The Commissioner of Public Works reserves the right to reject any or all bids.

No proposal will be considered unless the party submitting the same shall furnish evidence satisfactory to the Commissioner of Public Works of ability, and the possession of the necessary facilities, together with sufficient pecuniary resources, to fulfill the conditions of the contract and specifications.

OSCAR E. HEWITT,
Commissioner of Public Works.

Bids: November 9, 1943 (192)

### General Construction, etc.

WAR PUBLIC WORKS PROJECT
No. PA 36–133
The Titusville Hospital, Titusville, Pa.

Separate sealed bids for an addition to The Titusville Hospital for I—General Construction, II—Heating and Ventilating, III—Plumbing, IV—Combined Bid for Heating and Ventilating (II) and Plumbing (III), and V—Electrical Work, including alterations to the present building, will be received by The Titusville Hospital, Titusville, Pa., at the office of the Secretary, Room 301, Second National Bank Building, Titusville, Pa., until 3 o'clock P.M. E.W.T. November 9, 1943, and then at said Secretary's office, publicly opened and read aloud.

The Information for Bidders, Form of Bid, Form of Contract, Plans, Specifications, and Forms of Bid Bond and Performance Bonds may be examined at said office. Copies thereof may be obtained by making application to Charles F. Owsley, Registered Architect, 211 North Champion Street, Youngstown, Ohio, upon payment of $25.00 for one set. Any bidder, upon returning such set promptly and in good condition, will be refunded his payment, and any non-bidder upon so returning such a set will be refunded $15.00.

The Titusville Hospital, Titusville, Pa., reserves the right to waive any informalities in or to reject any or all bids.

Each bidder must deposit with his bid security in the amount of 5% of his bid in the form and subject to the conditions provided in the Information for Bidders.

Attention of bidders is particularly called to the requirements as to conditions of employment to be observed and minimum wage rates to be paid under the contract.

No bidder may withdraw his bid within 45 days after the actual date of the opening thereof.

THE TITUSVILLE HOSPITAL
By James M. Light
President

Attest:
Floyd B. August
Secretary
October 20th, 1943

Bids: December 6, 1943 (1

### Concrete Bridges

ESTADO UNIDOS DE VENEZUELA
MINISTERIO DE OBRAS PUBLICAS
DIRECCION DE VIAS DE COMUNICACION

Caracas, September 25, 1943

*Construction of Concrete Bridges in Venezuela*

Sealed proposals in duplicate will be received for the construction of seven reforced concrete continuous girder highway bridges, together with approach culverts, dikes and slope protection blanke located along the Carretera Occidental tween Ospino and Barinas in the States Portuguesa and Barinas, Venezuela, un 10 A.M., *December 6, 1943*, in the office the Ministerio de Obras Públicas, Direcci de Vias de Comunicación, Caracas, Ve zuela, and then publicly opened.

The lengths and number of spans of t bridges are as follows: 140 meters, 5; 2 m., 9; 85 m., 3; 290 m., 10; 180 m., 120 m., 4; and 195 m., 7. All seven bridg were designed for H-15 loading and a similar in cross section, having a 6.0 m. roa way between curbs. The reinforced co crete piers, are all the same size at t coping and have the same face batter, b vary in height to suit the particular locati The abutments are of the open type, co sisting of a reinforced concrete girder e tensioned transversely at each end serve as wing walls. The girder is carri by two reinforced concrete piers, which a supported on a single reinforced concre footing. The foundations for six of t bridges are spread footings, and the seven is supported on timber piles. The surrounding each abutment is protected an unreinforced concrete apron. The a proaches, extending to the existing highwa consist of sand or run-of-bank gravel fi The work to be performed includes the fu nishing of all labor, material (except c ment, steel sheet piling, timber foundati piling, structural steel and reinforci steel), facilities and equipment necessa to complete the project in accordance wi the plans and specifications. Cement, ste sheet piling, timber foundation piling, stru tural steel and reinforcing steel will be fu nished the Contractor for use, erection incorporation in the work.

Copies of the plans and specifications m be obtained from the Dirección de Vias Communication in Caracas, Venezuela up payment of a deposit of 500 bolivares. Pla may be examined in that office, or at t office of Parsons, Brinckerhoff, Hogan Macdonald, Engineers, 142 Maiden La New York City.

For further particulars, address the office The Minister of Public Works of Venezue 30 Rockefeller Plaza, New York, N. Y.

Additional OFFICIAL PROPOSAL Advertisements on page 23

# OFFICIAL PROPOSALS

*RATE: THE RATE FOR OFFICIAL PROPOSAL ADVERTISING IS 50 CENTS PER LINE (OR FRACTION) PER INSERTION*
*COPY RECEIVED UP TO 10 A.M. TUESDAY FOR ISSUE OUT THURSDAY SUBJECT TO SPACE OPEN FOR LAST MINUTE ADS*
*SEND COPY TO OFFICIAL PROPOSAL DIVISION, ENGINEERING NEWS-RECORD, 330 W. 42ND ST., NEW YORK, N. Y.*


**DAILY REPORTS**

*at your service . . .*

CONSTRUCTION project reports on proposed work, bids asked, low bidders, contracts awarded are available daily by first class mail for $10 per month. For details and samples write.

*Manager, Business News Department*

**ENGINEERING NEWS-RECORD**
**CONSTRUCTION DAILY**
330 W. 42nd St., New York 18, N. Y.


## OFFICIAL PROPOSALS
(Continued from preceding page)

Bids: November 3, 1943 (187)

### State Highway Work

Sealed proposals will be received by the State Highway Department at its office, Dover, Delaware, until 2:00 P. M. E. W. T. November 3, 1943, and at that time and place publicly opened for contracts involving the following approximate quantities:

CONTRACT 833
Slaughter Beach Groins
Slaughter Beach, Sussex Co.
3 — 150' Timber Groins
2100 Lin. Ft. Creosoted Timber Piles
27 M. B. M. Creosoted Timber Sheeting
9 M. B. M. Creosoted Timber Wales

CONTRACT 837
Church & S. Main Sts.
Selbyville, Sussex Co.
Cement Concrete Widening 0.92 Mi.
1500 Cu. Yds. Excavation
1125 Cu. Yds. Cement Concrete Pavement
900 Lin. Ft. Expansion Joint
300 Lin. Ft. Cement Concrete Curb
1000 Sq. Ft. Cement Concrete Sidewalk
200 Lin. Ft. 12" Concrete Pipe
30 Lin. Ft. 15" Concrete Pipe
6 Catch Basins
3000 Lb. Castings

Attention is called to the Special Provisions in the proposal, specifications and contract agreement.

## OFFICIAL PROPOSALS

Performance of contract shall commence within ten (10) days after execution of the contract and be completed as specified.

Monthly payments will be made for 90 per cent of the construction completed each month.

Bidders must submit proposals upon forms provided by the Department.

Each proposal must be accompanied by a surety bond, certified check or money to the amount of at least ten (10) per centum of the total amount of the proposal.

The envelope containing the proposal must be marked "Proposal for the construction of State Highway Contract No. ....."

The contract will be awarded or rejected within twenty (20) days from the date of opening proposals.

The right is reserved to reject any or all bids.

Complete sets of plans and specifications may be obtained after October 18, 1943 upon receipt of two dollars ($2.00) for each contract, which amount will not be refunded.

Make checks payable to the State Highway Department.

STATE HIGHWAY DEPARTMENT
By F. V. duPont, Chairman

W. W. Mack, Chief Engineer,
Dover, Delaware,
October 6, 1943.

# EMPLOYMENT OPPORTUNITIES

**RATE: 10 CENTS A WORD, MINIMUM CHARGE $2.00**

*...ns Wanted* (full or part time individual ...d employment only), ½ the above rates, pay... in advance.

*Box Numbers* in care of any of our New York, Chicago or San Francisco offices count 10 words additional in undisplayed ads.

*Discount of* 10% if one payment is made in advance for four consecutive insertions of undispalyed ads (not including proposals).

*Copy for new advertisements received until 10 A. M. Friday for following Thursday's issue*

### POSITIONS VACANT

... Positions Vacant advertisements are ...shed subject to agreement by the adver... not to consider applicants now em... on war work unless they obtain writ... release from present employer.

...INEERS AND DRAFTSMEN, structural, ...trical, piping, and mechanical. Defense Southern Indiana. Apply P-928, Engineering-News-Record, 510 Michigan Ave., Chicago ...

...D ENGINEERS and Draftsmen, Civil ...ineers Office, Pittsburgh District. Mu... and topographical work. P-938, Engi... News-Record, 330 W. 42nd St., New ... 18, N. Y.

...INEERS AND DRAFTSMEN, structural, ...trical, piping, and mechanical. Defense Southern Indiana. P-942, Engineering ...-Record, 520 N. Michigan Ave., Chicago ...

### POSITIONS WANTED

...L ENGINEER, graduate; 34 years experi...; design and construction; water sup... industrial plants; power plants; hydro... developments. PW-961, Engineering ...-Record, 330 W. 42nd St., New York 18.

### POSITIONS WANTED

SUPERINTENDENT. Excavation, Grading, Sewers, Water Lines, Foundations, Bridges, Buildings. PW-946, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

GRADUATE CIVIL ENGINEER, age 33, 8 years varied experience in Highway, bridge, industrial industrial and natural gasoline plant construction. Married, two children. Draft status 3-A. Now employed by major company. Change desired to secure permanent location. PW-947, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

PURCHASING AGENT desires position with general contractor or manufacturing plant. Age 50. Go anywhere. A-1 References. PW-948, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

CONSTRUCTION SUPERINTENDENT 20 years Paving Sewers, Excavating Quarrying Asphalt and Ready Mix concrete also accounting purchasing. South or Central America preferred. PW-950, Engineering News Record, 330 W. 42nd St., New York 18, N. Y.

PROJECT MANAGER or general superintendent. Experience 30 years covering all kinds of structures and types of contracts in both the private and government fields, last three on defense housing. Location immaterial. PW-911, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

### POSITIONS WANTED

ESTIMATOR ENGINEER, 30 years experience, in responsible charge many War, Navy & Housing Projects. PW-944, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

CONTRACTOR'S FIELD ENGINEER, Industrial, Commercial and Public Buildings; Airports, Bridges. PW-945, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

MANAGER OR SUPERINTENDENT structural steel fabricating plant; 25 years experience; age 50; married; go anywhere; permanent position only; can furnish A-1 references; capable handling any size plant and get results. PW-959, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

(Continued on following page)

***Don't forget the***
**BOX NUMBER**
When answering the classified advertisements in this magazine don't forget to put the box number on your envelope. It is our only means of identifying the advertisement you are answering.

# EMPLOYMENT OPPORTUNITIES

**RATE: 10 CENTS A WORD, MINIMUM CHARGE $2.00**

*Positions Wanted* (full or part time individual salaried employment only), ½ the above rates, payable in advance.

*Box Numbers* in care of any of our New York, Chicago or San Francisco offices count 10 words additional in undisplayed ads.

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## POSITIONS WANTED
(Continued from preceding page)

SUPERINTENDENT — Carpenter Foreman — all types—Concrete and Heavy construction. Industrial Federal Housing. Age 40 years, graduate Civil Engineer, 2 years foreign experience. PW-963, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

CONTRACTORS ENGINEER, graduate, 30 years wide experience building and general construction, including purchasing, estimating expediting, negotiating. Salary $100 per week. PW-964, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

PLANT ENGINEER experienced in construction, plant expansion, and maintenance. Graduate engineer, married, age 30, employed but can furnish release. Ohio location preferred. PW-965, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

SALESMAN has Contacts General Contractor, Shipyards etc., excellent background, salary. PW-966, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

DESIGNING ENGINEER Graduate registered age 42, thoroughly experienced in design, estimates inspection specification for heavy structures. Railroad Highway rigid frame-bridges industrial buildings etc. Available for responsible position. Part or full time. Best references. PW-956, Engineering News-Record, 330 W. 42nd St. New York 18, N. Y.

## POSITIONS WANTED

LICENSED CIVIL ENGINEER and Surveyor. Experience covers supervision of large land and topographical surveys, general construction and layout work. Available Nov. 15. PW-960, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

ARCHITECTURAL ENGINEER, age 42, employed past 3 years by Army as estimator and chief specification writer on Panama Canal defenses, will be released January 1st and seeks future connection. Prefer Latin America but will go anywhere. Also experienced in architectural design construction supervision and as office engineer. Conducted own private practice 12 years in United States. Evidence of release furnished on request. Box 27, Curundu, Canal Zone. (Air Mail requested.)

DESIGNING ENGINEER, 41, B.S. in C.E., 1925, M.C.E., 1943, Assoc. Mem. American Soc. of Civil Engineers, N. Y. State license Professional Engineering; 18 years responsible design experience on drydocks, piers, trestles, bridges, industrial buildings, airports, waterways, dams, tunnels, water supply and sewage disposal. Expedienced in approved design methods of concrete timber and steel construction, and soil mechanics. Available immediately. PW-951, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

STRUCTURAL ENGINEER, 29, M.I.T. graduate, 7 years varied experience in structural design. Available immediately. Married, one child, 3A. Prefer responsible position in any phase of structural engineering anywhere in U. S. Will travel. Stanley Levitt, 1503 Washington Ave., Greenville, Miss.

## POSITIONS WANTED

ESTIMATOR—experienced preparing bids on general contracts for housing, defense projects. Familiar with recent government construction, prices, job management, supervision tendence. PW-957, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

MASTER MECHANIC—Six years experience maintenance of Public Works Garage and repairs of approximately 600 trucks, tractors, cranes, etc. for Bureau of Yards and Docks U.S.N., Guantanamo, Cuba. Approximately two years on present defense job, contract number 1567 Maintenance of all motor equipment and installation of large stationary machinery. Age 30, married, one child. Speak English or Spanish. Location of work unimportant. Available 10 days notice. Reply J. H. Ramsey, Master Mechanic, Frederick Snare Corporation, Naguabo, Orient, Cuba.

GENERAL SUPERINTENDENT or Assistant Project Manager—25 years experience supervision and estimating industrial and commercial buildings. Federal Housing Projects, railway and highway bridges, water treatment and sewage disposal plants. Past three years in Southeast on Naval air station and training base. Good record and reliable reference. Available after November 1st with competent field organization. PW-935, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

## WORK WANTED

EQUIPPED SURVEY PARTIES for all types of surveyor construction work. Any location. Harwood, 258 Broadway, New York City.


*To EMPLOYERS who advertise for MEN:*

WHEN there are many applicants for a single position it frequently happens that the only letters acknowledged are those of the most promising candidates. Others may not receive any indication that their letters have even been received by a prospective employer much less given consideration. These men often become discouraged, will not respond to future advertisements, and sometimes even question their bona fide character.

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We suggest this in a spirit of cooperation between employers and the men replying to Positions Vacant advertisements.

*Departmental Staff*

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